The Hunterian Oration

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GENTLEMEN,—No word of defence can be needful for the form in which English surgeons have chosen to celebrate the memory of Hunter; but an apology may be offered by one who now attempts the task of speaking of him. The duty of reviewing in this place the life and work of Hunter has been so often and so ably performed that it seems to me I can do but little else than incur failure by any effort to tread in such familiar footsteps. But although tempted, as I may have been, by this and other reasons to turn aside into some less known path, yet a natural sense of loyalty to the great surgeon and of responsibility to the trust I have accepted has constrained me, and so Hunter in his work must be again the subject of what is called with oppressive grandeur the "Hunterian Oration."

Surgeons with one voice have proclaimed the supremacy of Hunter above all who have ever studied surgery. Students of science have acknowledged him to be among the chief of those who have in any age advanced human knowledge. Yet although his claims have been often examined, and many students and surgeons have been engaged in the task, his greatest to the high place he holds is not always recognised, perhaps not even always understood. May I stand excused, then, for asking once more, and attempting to answer the question, What has Hunter done?

It has been well said that when we attempt to estimate the achievements of the foremost men of past ages too often we see them only in eclipse. A large part—it may be much the larger part—of what they did is too often hidden from us. The proportion of sudden, or what may now appear as sudden, discoveries may be seen, though from afar; they may still strike us even from a distance. But we can now no longer adequately appreciate the conditions under which the pioneers of knowledge laboured. In the light of the present day it is difficult to realise the darkness of past times, or to measure fairly the part they played in dispelling it. We may diligently trace the course they took, and become familiar with every step of it, and yet fail to understand that they not only trod, but actually made the way.

But was Hunter a great discoverer—I mean in the ordinary sense of the word? For we speak of discoveries in science, sometimes forgetting that all real progress involves discovery. What are the particular discoveries, then, or improvements in the art of surgery, which are now recalled by the mention of his name? We quote at once, as an instance, the operation for aneurysm, known to all as the Hunterian, and then—we pause. What else shall be declared upon which his fame particularly rests? Anyone, indeed, who has but a passing acquaintance with the works of Hunter can speedily furnish a long list of important papers in which many new and valuable facts are revealed, and knowledge largely increased, not only in anatomy and physiology, but in pathology and surgery. More than one or two of these would alone suffice to establish the author's claim to ability and industry of no common order; but in none of them can be pointed out, I think, any particular discovery in surgery from the loss of which Hunter's fame as a surgeon would materially suffer.

But let us go further. As a surgeon was Hunter pre-eminently skilful in practice? Was he, beyond all other surgeons of his time, sagacious in diagnosis or successful in treatment? Was he even dexterous in operation? I do not know where to find the evidence upon which these questions can be answered in the affirmative; indeed, on the latter point there is evidence to the contrary. Or, once more, was he a learned man in his profession, as the phrase is commonly understood? Was he, as we say, a "well-read" man? Was he fully informed of the labours of others? I fear it must be admitted that the testimony in favour of this belief is very slender too. The introduction of the operation for aneurysm which bears his name was indeed a great step onward. In taking it he gave ample proof of rare foresight, which could proceed only from sound apprehension of some important facts in pathology and surgery, and a masterly grasp of some of the leading truths of physiology. Yet we bear witness to Hunter's fame when we acknowledge that even this grand discovery, among the chief in surgery, adds comparatively little to it.

What more, then, did Hunter achieve? What was he, therefore? Wherein consists his greatness? He was, and is, beyond and above all surgeons, a philosopher in surgery. His idea of the subject of his thoughts was far more adequate than that of other men. He was supreme in the scope and method of his work. He understood much better than those around him how to engage in the interpretation of Nature; he knew best how to approach and to disclose truth; for he not only understood that the problems which lay immediately before him were of all the most complex and difficult to solve, but he could see also that they were not isolated, but dependent ones. He saw in the necessary relation in which they stood to others the only means by which they could be worked out, and on this understanding he resolved to investigate the questions he desired to answer. But consider for a moment what, with the light in which Hunter then stood, that resolution involved. Remember how often, in more recent times, have able men doubted the doctrine, hesitated to accept the idea of that intimate relationship between the various forms of life—of their continuity, of that harmony of plan, of that unity of design, which Hunter not only clearly conceived, but so accepted as a vital truth that he made it the foundation of all his labours; and, after all, the only sure test of genuine and thorough belief is the work which comes out of it. This was the principle on which Hunter never wavered; it was the star that guided him—without haste, without rest—through all the work of his life.

But observe, I pray you, further, how Hunter proceeded in his work, for this is eminently characteristic of the man. He is not fond of starting propositions, which are then supported by arguments and made plain by illustrations; but his practice is to demonstrate in their order, without comment or dissertation, the facts which reveal knowledge. His habit appears to be, not to say to us, "I am convinced of this, and I will tell you why there can be no doubt about it," but rather to place the premisses before us—sometimes, it may be, with indifference, certainly without regard to effect, or any attempt at direction. His purpose appears to have been uniformly not to support a conclusion, but rather to make way for one. This, I think, is inscribed on the proudest monument of his genius—his Museum. May I ask you, only for a few moments, to look once more at it?

The passion of Hunter for collecting is well known; it has often been the subject of comment. His Museum included not only, to use the words of Professor Flower, "illustrations of life in all its aspects, in health and in disease; specimens of botany, zoology, palæontology, anatomy, physiology, and every branch of pathology; preparations made according to all the methods then known; stuffed birds, mammals and reptiles, fossils, dried shells, corals, insects, and plants; bones and articulated skeletons; injected, dried and varnished vascular preparations; dried preparations of hollow viscera; mercurial injections, dried and in spirit; vermilion injections; dissected preparations in spirit of both vegetable and animal structures, natural and morbid; undissected animals in spirit, showing external form or waiting leisure for examination; calculi and various animal concretions; even a collection of microscopic objects: but it extended to minerals, coins, pictures, ancient coats of mail, weapons of various dates and nations, and other so-called 'articles of vertu.'" Yet I do not doubt that, notwithstanding the apparently miscellaneous character of a great part of his museum, this vast collection was very far from being what could be called an empirical one. Save in material, it had nothing in common, as some would suggest, with an old curiosity shop. For myself, I believe that even the objects found there, which appear most foreign to the

subject of his thoughts and work, were not introduced from mere idle fancy, but for the purpose, either at once clearly or dimly seen, or, if otherwise, at least conceived possible, of throwing light in some way upon the great questions of which his mind was full. I submit that this view is worthier than the prevailing one of the character of Hunter; and it is fortified by evidence of the strongest kind. Look at that section of his Museum which, as Professor Flower truly says, is most characteristic of the man—that which is called, and I venture still to think well called, the physiological. Had it been somewhat more fragmentary than it was when he left it, had not a fuller light been thrown on the truth it illustrates by the masterly labours of von Baer, the brilliant exposition of Milne Edwards, and the thoughtful volumes of Carpenter, how much longer would the great idea, that governs this unrivalled series, have remained concealed? Nay, even still, how often in the comments made on it, is this idea unheeded or overlooked? It is a magnificent collection of comparative anatomy, or, as we may speak now, of morphology. It sets forth the variations in form which the different organs undergo in different species, or in the same species under different conditions. But, above all, it introduces us, in the happiest way, to the study of comparative physiology. It demonstrates the great law of progress from the general to the special; the law of evolution from the simple to the complex; the principle of elaboration, and advancement of function by division of labour. Or, again, as Professor Flower admirably puts it—and need I apologise for quoting him here in reference to the Museum?—it throws "light upon one of the great biological problems, classification; which, when rightly interpreted, means nothing more or less than a statement of the order in which living beings have been evolved from one another." I know not, indeed, whether Hunter ever formulated this idea. He has not laid down the law in explicit terms. I can find no distinct expression of it in any sentence he has written which has reached us. But, then, hasty generalisation was no habit of his mind. I do not doubt that, in some large degree, he grasped it, and had he lived on, as the truth became established, he would have made it plain to all. When his labour ceased, he was working out the great idea. But by such glimpses as we thus obtain of the character of his mind and the method of his inquiry, of the way of his genius to begin the search for the truths he sought at the furthest outposts, and thence, so to speak, to work inward and upward, I cannot regard the possession of any facts or illustrations which he was enabled to collect, but had not time to place, as wanton or purposeless, or even merely curious. To me they are wonderful, but withal most suggestive, that the great mind of Hunter was not only far in advance of his own age, but is hardly overtaken by this.

The same method of work is plain in Hunter's labours in surgery. He was ever searching for principles, but strove to reach them only through facts. Facts always first; but never facts only. From facts to principles. He understood that all progress mainly depends on the power of grouping and uniting for some new purpose facts that have been discovered independently, and that are daily being revealed, yet with little or no reference to the principles they are found to support. And here, again, after a careful examination of Hunter's work in surgery, it is necessary to pause and review it in relation to the knowledge of his time. Then I think we are impressed, not so much by the actual advance he made in the art, as by the degree in which, through the character of his work, he raised surgery to the level of a science. I would almost venture to say that he effected more by the nature of the questions which he set than by the answers which he worked out. Surely his conception of surgery, of its possibilities in the future, of its relation to the sciences, of the plan—the only sure one—upon which it could be advanced, went very far beyond that of any surgeon before him—shall I say has gone far beyond that of most surgeons after him? But if he could thus estimate the task before him, what shall we say or think of Hunter as we watch him, with unexampled diligence and patience, pondering over the preface? Never turning a page of the great book of Nature, which he had set himself to read, until each sentence before him had been duly weighed, and all that he could learn from it had been secured. But this was not enough. He not only saw that surgery, to be soundly established, must rest upon pathology, but that the language of pathology required an interpreter; that its problems could be solved only by the light of physiology. Where in any work before his—nay, where in any since—shall we find such a union of physiology and surgery? In the pages of Hunter, but there I think only, are they found, as they should be, literally woven into one. We study his chapters on the Blood, on Inflammation, and on Gunshot Wounds, and acknowledge that nowhere else are the principles of pathology so supported and illustrated by the facts and truths of physiology. Yes, as no one before him has given proof of so clear and ample a conception of the relation of surgery to natural science, so in no one since has it borne such fruit. Hunter not only saw more fully than anyone who preceded him the way in which the art of surgery, through a knowledge of physiology, could be advanced, but he possessed the happy power of working to far better purpose upon this understanding than any of his successors. Nay more, the same power of mind which gave him a larger grasp of surgery raised him to a loftier view of the science on which it is founded. He knew better than other men in what direction to look, and when he turned his eyes thither he could see further.

So now, as we stand upon higher ground on this side of it, we can discern, I think, the idea which pervaded Hunter's work. He saw that surgery in his time was but a rude empirical art, consisting of little else than a knowledge of many facts which stood in no visible relation to each other, and of many more opinions which, for the most part, had no relation, or but a very distant one, to any facts whatever; that surgery should be raised from a collection of such creeds to the rank of a science; but this could be only by founding its practice upon sound principles. The discovery of some at least of these principles was Hunter's final aim. But these principles could not be reached by guessing; they could be approached only through the orderly investigation of facts. But then an explanation of these facts themselves could be only through the truths of physiology. The signs of disease could be understood only by him who had studied the laws of life and health. An intelligent interpretation of the one could only be in proportion to a previous knowledge of the other. But the problems of life and health are presented to us in man in their most complex form—in a form so difficult that even Hunter could not solve it. They must be reduced to simpler terms through a study of the lower forms of life. Thus, with the ultimate aim of relieving human suffering, Hunter studied the phenomena of motion in plants. Nay, he went further—to crystals and other forms of inorganic matter,—and he says: "The better to understand animal matter, it is necessary to understand the properties of common matter, in order to see how far these properties are introduced into the vegetable and animal operations." Note the characteristic thought at the end of the sentence. He does not start with a denial or an assumption, but he is anxious to "see how far." And if it must be said that in his attempt to grapple with the crucial problem of life Hunter failed, it must be acknowledged that he failed only in the task where none have hitherto succeeded. And the weakness he exhibits here appears chiefly in the fact that he encountered this, the greatest of all questions before him, not always according to his wont, by careful, patient, and impartial investigation of the facts which lead up to it; but it must be confessed that the dominant idea of a living or vital principle was too ready to do duty for causes that were to him then, as they are to us now, obscure. Yet, even here where Hunter is tried by the severest of all tests, one cannot but observe in what favourable contrast he stands to others who have attempted to solve the problem; how determined he is, for instance, to depend for the most part on experiment, and how comparatively trivial has been the advance in actual knowledge of the subject since his time. Recently we have learnt, indeed, to recognise more fully the play in the living body of the common forces or forms of force of nature; and hence we have been led to suppose that the forces peculiarly vital may hold the same relation to them as they do to each other; that all the distinctive phenomena of vital action may depend on the transformation of force with which elsewhere we have become in effect more or less familiar. But beyond this attempt to see, as Hunter put it, how far the common forces of nature are concerned in the phenomena of life, and the reasonable conjecture that has hence arisen of the relation of the vital within us, and the forces around us, how much further have we gone? Yes, Hunter stood before the crowning mystery of life, and could not raise the veil. But, then, to whom

amongst the sons of men has it been yet given to draw it aside? Let the darkness which, after another century of thought and work, still enshrouds the subject be the comment on Hunter's reflections on the nature of life.

Now, perhaps the question may be worth asking, How far is it practicable in the present day to turn to good account the priceless legacy which Hunter has left us in the record of the plan on which he studied surgery? How far is it possible to follow now, at however great a distance, the example which he set? Or to put it thus:—Supposing Hunter to have lived in our day, could the range of his work have been still as ample? How much of what he did depended for its scope on himself?—how much on the scanty state of knowledge of his time? If Hunter lived amongst us now, his grasp of natural science and of surgery would, of course, be very different from what it was in the last century. It is common to remark that knowledge in this, as in other directions, has increased so largely that the relation in which any man can stand to the whole of it must be very different now from what it was a hundred years ago.

As knowledge advances, and the sum of it accumulates, the share which any one man can appropriate must of necessity gradually grow less, and become a smaller fraction of the whole. There can be no help for this or remedy, save in a corresponding advance in the development of the human mind. What reflection is more familiar to us than that on the progress of knowledge? But is the power of apprehending it greater now than it was in the days of Plato or Aristotle? This must mean that, as the world goes on, the attainments of even the foremost in intellectual power must become more partial. Who now would dare to talk of taking all knowledge for his province? It involves the fact of greater individual incompleteness. In the old days, the best men could be more on a level with the knowledge of their time. Thence every year onward places even these further below it, and the great law of division of labour prevails. Yet for this there is a gracious law of compensation. For while, on the one hand, there is now so much more to be seen; on the other, the master minds of previous ages have made it much easier for us to see. For by the establishment of principles, the outcome of their labours, we are raised, as it were, upon the shoulders of our ancestors, and the horizon of our vision is more comprehensive than theirs. For as facts accumulate and principles become moulded out of them, not only does the apprehension of these principles enable us, except for special purposes, to dispense with many facts, but such expansions of knowledge have a value far beyond this. Principles are the means by which important facts are fixed and registered. They are means by which our knowledge of the facts they embrace are secured and made available for the future. Disconnected, isolated facts—facts which are not orderly arranged and assimilated into principles—are in constant danger of dying out. Very greviously, I imagine, has the practice of medicine and surgery suffered from this loss. It is painful to think of the multitude of facts which must have been known to the older physicians and surgeons that either have been, or are being, from time to time mislaid by us. Many of these no doubt, in the course of knowledge, have become worthless, being superseded by others, but many, too, had probably a value that now we can neither appreciate nor understand.

Let us look at this matter more closely in its relation to surgery. What place should physiology, for instance, occupy in the study of surgery? I am not speaking now of physiology as a chief instrument of education (a very different matter), but I ask what share it should receive of the time and attention of the student of surgery? Some knowledge of physiology is essential to the surgeon. This statement, I suppose, will be generally accepted. At all events, those who may think otherwise will hardly care to say so in good company. But then how much of physiology is needful for the surgeon? What parts of it may safely be left alone? I would answer shortly, that the principles of physiology should be thoroughly understood by the surgeon, and with these, perhaps, what may be called the leading facts.

For instance, with reference to the circulation, it seems to me that every surgeon should understand the function and mode of action of the heart, arteries, veins, and capillaries; but I do not think that every surgeon need be able throughout his life to state the facts and observations upon which the conclusions are based. I think he should understand the meaning of the capillary circulation and its relation to the other parts of the circulatory system, and the conditions by which the pressure of the blood is regulated; but I should not think it necessary for him to be able always to follow the impressive series of facts through the vegetable and animal kingdom upon which these conclusions are founded. Thus he takes advantage of great principles which have been established on a multitude of facts; and, by intelligent study of a few weeks, he may be spared many months of what might, perchance, prove to him tedious detail.

So with respiration. He should understand, I think, not only the mechanism of the process in man, but the principle on which a respiratory organ is constructed; which are the essential and which the accessory parts. But he need not be called upon to remember always the various forms of the respiratory apparatus in the animal kingdom.

So with digestion. He should, I think, understand what is known of the function of different portions of the alimentary canal, and of the organs accessory to it; but he need not be able to recognise at a glance through the microscope a particular section of every part of it.

Now, assuming, as we have done, that some knowledge of physiology is necessary to the surgeon in ordinary, have his labours in this science, if properly directed, been extended, do you imagine, by its advance? I should say, on the contrary, that they have not only been reduced and shorn of many difficulties, but that, if only his studies be conducted with moderate judgment, he can now acquire much more than formerly upon far easier terms. If any doubt exists in the mind of anyone of what has thus come of the enunciation of principles, or of what I would call leading facts in physiology, let him look over the history of our knowledge of the great subject of development. Of what a mass of hard, dry, almost unintelligible statements it formerly consisted. Now, I do not mean to say that our present knowledge of this subject is free from all intricacy; but as much that was mysterious and doubtful has become clear and plain, I appeal to all who have studied it whether the task has not only been made far more agreeable and profitable, but whether it is not now easier to get it all "up," as the phrase is, in a shorter period of time. And, further, this applies not only to the surgeon properly so called, not alone to one who studies physiology only as a means to an end, but it applies also to those who would study physiology, as Hunter did, with the pure view of its advance. That which occupied Hunter years to unravel may now be gathered up in a few days, and from the point so readily reached the work may still be carried on. The field of labour, the ground which has to be upturned, is happily now no longer the same; but what change is called for in the method of work, what improvement can be suggested of the plan which Hunter pursued?

Now, while for the scientific surgeon a knowledge of the principles and leading facts of physiology will suffice, for the practice of surgery a knowledge is required not only of the principles of surgery, but of as many facts as possible and of detail of every kind. But although in the practice of surgery acquaintance with every fact and familiarity with every detail is of importance, inasmuch as it may be useful in some degree in promoting recovery or alleviating distress, yet in surgery, as in physiology and other sciences, and for the same reason, a knowledge of principles must be always paramount, and it is only by their discovery and establishment that its advance will be secured. Principles are in the practice of surgery what grammar is to language. Men may talk without grammar, speak even good English without knowledge of grammar, and men may practise surgery with little or no knowledge of its principles, just as a mariner may sail in familiar waters without compass or quadrant. But what if strange difficulties should arise?—and is it unusual in surgery to encounter them? What when we pass, as often we are driven, from the well-worn track of every-day experience!

Surely, the great lesson which Hunter taught and teaches, the example he set in the study of surgery, was never more needful than it is now, when every year the strain in this direction becomes more urgent. I think from the time of Hunter to the present we can trace his influence upon the scientific study of surgery through a long line of distinguished men. But the improvement of surgery as an art is not altogether favourable to the progress of surgery as a science. For as the art of surgery advances, and skilful management of detail involves more and more of every surgeon's care and time, the study of principles is in danger of being neglected. There may be less of science because there is more of art. And then the art of surgery is—apparently,

at least—the more immediately important. Its application to practice is more obvious and, to the general view, more useful. Above all, it leads to an end by a shorter path and easier steps. To study surgery as a science, and to master its principles, makes a far larger demand on the intellect, and involves higher and rarer qualities than to acquire technical skill in the form, not only of mere manual dexterity, but also in that of familiarity with routine. In a word, the knowledge of the art of surgery means far less expenditure of that which most men are most loth to yield than a study of the science, and secures always a more immediate, and usually, in one sense, a more substantial return. Hence it is popular, and is likely to become still more so. This may be from a certain point of view—which is not the finest—of temporary advantage to particular surgeons, but in the highest sense it is bad for surgery. Moreover, the truth is, that science is never able to accomplish much when held in bondage by the immediate wants of life. Its investigations are successful only when they are pursued with indifference to the uses to which they may be applied.

This suggests, then, a question for the future, the answer to which seems to be hardly an encouraging one. As in each successive year facts and details in every direction—all of more or less immediate importance in the practice of surgery—accumulate, less and less time and attention are likely to be spared for the study and apprehension of its principles, to say nothing of the neglect of the sciences upon which these principles are founded. Is not surgery itself, then, as a science, it may be asked once more, in danger from the extension of surgery as an art? I can imagine there are some who will admit that this is so with very sinister complacency. But what would Hunter have said to it? And, unfortunately, in the present tendency of affairs, what he does say and teach is likely to become unheeded, for it can hardly be expected that the study of his works will survive the decline of scientific education.

The law of division of labour is oftentimes appealed to in this matter, but I venture to think this is not, or at least ought not to be, a case in point. It is often said that as surgery advances, and the art grows more extensive, it becomes more impracticable for anyone to entertain the whole of it. Thus then, first of all, the study of surgery as a science must be set aside by practical men, and then the art must in turn be broken up, the several portions of it being assigned to different practitioners. Now with regard to what is called specialism, let me say at once that I have no word to utter in disparagement of that form of it which consists in a man, first of all, studying and duly qualifying himself in the principles and practice of surgery as a whole, and then at length devoting his attention more especially to the cultivation of some particular department of it. This is not the form of specialism against which I would protest. In my humble opinion, it is in no way an unworthy one, and, if it were, it is by no means frequent. It is no illustration of the law of division of labour as commonly understood, for excellence is not here obtained solely by exclusiveness. But the kind of specialism which should be denounced, and which it is to be feared is not very rare, is that which consists in the practice of some particular portion of surgery without adequate attainment in, or continued study of, surgery as a whole. This is a form of exclusiveness detrimental, I think, to the progress of surgery, and therefore to our profession, both from a scientific and social point of view, and to the public. This I take to be a false application of the law of division of labour, which in manufacture and in many branches of skilled labour is so advantageous, and even inevitable, for ease, rapidity, and cheapness of production, and by which every day human hands are being superseded by machinery. The law of division of labour is, indeed, generally recognised and very useful here, but it is not known, and has no place, in the noblest science or in the highest art.

While, then, we contemplate the genius of Hunter in his works, he has left us an example which is not altogether out of our reach, in his conception of the subject and his idea of the plan of studying it. His view of surgery was more comprehensive, far worthier than that of others. Had he lived with us, would his views, do you suppose, have become narrower? would they have been less remote from specialism? Is it now no longer practicable to study surgery as Hunter studied it? Ay, but to study surgery as Hunter studied it means more than this. For he was great, not only in his understanding, in his apprehension of the nature of the task which lay before him, or in his appreciation of the difficulties of research, but he was great in the spirit with which he encountered them. His patience in ascertaining facts, in investigating questions of every kind, seems to have been well nigh inexhaustible. It was certainly no habit of his mind to take anything for granted, or, when he could help it, to accept any statement at second-hand. And this was the more remarkable in a man whose mind was ever on the alert for the larger truths beyond, to which facts are but the stepping-stones; for the titles of his various papers very often convey no inadequate notion of their contents. He writes on some fact in natural history which is carefully and accurately described. But very soon it is used in illustration of some principle which is forthwith expounded, or in evidence of some original view which is then set forth, or in suggestion of some further research. Thus the fact, of which only the title speaks, becomes the text of a very valuable discourse. Yet Hunter was also remarkable in this, that the ideas which constantly occupied his mind, and on which he was always at work, still left him with the keenest eye for every novelty which his labours incidentally disclosed, although it lay altogether outside the current of his thoughts. Thus, in addition to the progress he made in the main subject of his labours, he was always accumulating a multitude of what, for the time being, were isolated facts. In this way he must have added largely to his wealth of knowledge.

If there is any point clear in the character of Hunter's work, it is that it was real, genuine, thorough. It may be said, indeed, that this must be true of all good work; but not, I think, in the degree in which it is obvious in his. He is never content with a cursory glance or a superficial view. Even when questions arise in the course of some inquiry, which, so far as that end is concerned, may be lightly disposed of, Hunter almost invariably dwells on them, sometimes at such length and so exclusively as to suggest that he has forgotten the purpose on which he set out. But it is evident that he could not bear to go on his way passing by so much that was undone. This gives a singular character to many of his papers. Much of the apparent want of skill in arrangement and exposition, and the seemingly purposeless way in which oftentimes statement of facts are scattered through his writings, is, I think, due to embarrassment from the riches he had gathered. And the singleness of purpose with which he worked is made evident, not only in the actual result of his labours, for no human being with divided interests could rival such achievements; but in the record, as we have it, of the life he led. He gave not only the whole of his time—yes, the whole of it in no mere conventional sense—and all his great powers, his mind and body alike, to the one object of his life; but to this he sacrificed all that he possessed, all that he could gain. To this he devoted, without stint or scruple, his money, his friendships, all his other interests. What any other man would have considered impossible he made practicable. And this to no personal end. Careless of all reward save that which was to him paramount—the discovery of truth.

A noteworthy point in the character of Hunter appears to me to be found in the relation which in him thought bore to action. He combined in himself, in a very eminent, I had almost said in a singular, degree, the power of conception and of execution. He not only saw much further, but he was able to do much more than most others. He saw, as Bacon saw, and the idea was probably as original with him as with Bacon, that the systematic and thorough examination of facts was the first thing to be done in science, "and that till this had been done faithfully and impartially, with all the appliances and all the safeguards that experience and forethought could suggest, all generalisations, all anticipations from mere reasoning, must be adjourned and postponed; and further, that, sought on these conditions, knowledge, certain and fruitful beyond all that men then imagined, could be obtained." But he went immeasurably further than the great prophet of science in putting his conceptions to the proof in imperishable work on the lines he had laid down. "I only sound the clarion," said Bacon proudly, "but I enter not into the battle." Hunter sounded a clarion the echoes of which are reverberating still, but he entered into the battle also, was always found where the blows fell thickest, and we are in possession of the spoils. In his Museum there is at once the clearest evidence of the idea and the richest fruits of

execution. Bacon, we know, has been compared to Moses on Pisgah surveying the promised land, and Newton to Joshua, who began to take possession of it. But Hunter saw the Canaan of surgery, and took possession of it too.

The mode in which Hunter conducted his investigations in physiology and surgery reminds one of the scientific work of an engineer in laying siege to some fortress. He begins by examining in every way he can the character of the defences; he studies, by every means in his power, its strength of resistance; he measures, to the best of his ability, the difficulties before him. Then, when all this is done, and in nowise previously, he draws out deliberately the plan of attack, arranges the whole scheme of action, and works steadily, patiently, and persistently upon the lines so laid down. It may seem to those who look on in ignorance that time and force are wasted in such elaborate care and toil. But all this means that each step forward shall be well assured, and that there shall be no risk of having to fall back. Ever ready to take advantage of surprises or of dashing assaults, he does not reckon upon these, or allow any part of his design to be made dependent on their success. He goes in to win, not by chance, but by method, and the flag of his country at length floats upon the battlements, not as the trophy of the courage of a forlorn hope, but in triumph of scientific forethought and calculation.

The study of Hunter in his work is instructive, in view not only of what he was, but also of what he was not. What Hunter's acquirements were when he commenced the study of anatomy is not quite clear, and cannot be determined with precision now; but this, at least, may be considered certain—that he could not, at that time, have been called a man of good general education; and it appears certain also that never, at any subsequent period of his career, could he have devoted any care or time to attainments in literature. One result of this defect in him is evident, not only in the absence, in all he wrote, of that which is termed style, but even in the want of power of lucid expression. He cannot always say clearly what he means. His thoughts are too frequently involved in obscurity and confusion.

Very much has been said and written on the rival claims and opposing merits of science and literature; but surely to very little purpose. To compare or contrast the advantages of literature and science—to discuss their relative value even as instruments of education—appears to me to be as futile as to consider the relative advantages or proportionate value of the forces of Nature. Each has its place, its power, and its claims. Each by itself is incomplete, defective. But they are in their purpose correlative, each supplying that which the other lacks, and together, but together only, making the circle of knowledge and education complete. When the champion of science thinks lightly of attainments in literature, or the master of letters speaks with disdain of scientific knowledge, each, I take it, shows only that he cannot appreciate what he does not understand. It is, perhaps, the most conspicuous instance of the evil of that one-sidedness which springs from the inevitable division of labour; of the want of sympathy which is too common in distinguished men with any kind of work outside their own. It is, indeed, natural and necessary that men should become chiefly interested in that which is the daily occupation of their life, that they should prefer, before every other, their own pursuit. But it is unfortunate that we should grow so indifferent, as we commonly do, to the claims of branches of knowledge that we do not possess; and it is still worse if, instead of devoting any spare time at our command to their study, we employ it in denouncing the effort or in expressing contempt for them. In the example of Hunter, one passes over with impatience the numerous disquisitions in which attempts have been made to prove the enormous advantage that Hunter derived from want of education; how much less a man he would have been had he learnt more in his boyhood. No doubt very much depends on the nature of the subjects taught, and still more on the method of instruction. But I confess that to me it seems the education, of whatever kind, must indeed be a very bad one which is not better than none at all. My conviction is that if Hunter had received a good general education in early years, he would have been all the better for it. He would have lost nothing; his mental powers could have been in no way impaired—on the contrary, enhanced. He would have recorded the result of his labours in better order, with more light and greater effect; and we should have had the advantage of a clearer revelation of his thoughts.

But all this is very far from saying that Hunter was not, in the strictest sense, an educated man. He was not, indeed, a scholar. If the subtle rendering of a Greek poet or the skilful turning of Latin verse be the sole test of culture, he gave no sign of it. Of ancient lore he was sadly destitute. In *literis humanioribus* he could have had no place. But if a transcendant knowledge of Nature and her ways, if a firm and ample grasp of her noblest truths, be accounted education, if the devotion through a lifetime of gigantic intellectual powers and of a truly loving heart to the reverent study of God's works be culture, then Hunter, though not a man of letters, was surely a highly educated man.

I do not think that we can now obtain a closer view of the character of Hunter and of his habit of work than that which is afforded by his letters to Jenner. How entirely destitute they are of any trace of literary skill. Even after some correction, how clumsily and awkwardly they are for the most part expressed; evidently not a passing thought bestowed on their composition. But how they always struggle, often how straight they go, to the point. Always full of the subject of his work, they must thoroughly reflect the disposition of his mind at the time he wrote them. Careless of all form, and of everything else, save to get out of Jenner some information he wanted; now seeking directly for some knowledge which he believed Jenner to possess; now suggesting some inquiry that Jenner might make for him; sometimes plainly dictating the method of it; then begging boldly for some animal or other specimen which he coveted; occasionally only a word of persuasion or encouragement, or even an attempt at bribery, lest Jenner should grow weary of well-doing. All outside matters, whether public or private or domestic, ignored; except at rare intervals, when it is comical to see, as anyone may easily, that a sense of unbecoming neglect of these small ceremonies strikes him, and then we are surprised by some polite sentence in conclusion. Once, indeed, there is an attempt to console Jenner for some disappointment in love by the assurance "I shall employ you with hedgehogs." But the whole correspondence tells a simple tale of indefatigable industry, of unquenchable energy, of singleness of purpose and unbounded sacrifice; of determination, heedless of cost and difficulty and all else, to seize every possible opportunity of accumulating knowledge.

The fame of Hunter, after all, falls far short of him. It may, without exaggeration, be said that he is really greater than to most men, even to most surgeons, he appears to be. And the reason of this is not far to seek. Neither the genius nor the labour of Hunter is of a kind that at once strikes the inquirer, or can be readily understood by the student. He made no startling discovery, in the popular acceptation of the term, which can be discerned at a glance and appreciated by everyone. As we follow, one after another, the successive, or oftentimes, as they really were, the simultaneous works of Hunter, we may remark the absence of any apparently great intellectual feats; we are never dazzled by the brilliancy of particular achievements. We may, indeed, say of very much of what he did that it might have been produced by any very intelligent, thoughtful, and industrious man devoted to his subject. With regard to separate portions of it, we can very rarely go beyond this, and exclaim, as a famous author tells us that he did, as he threw down his pen over one of his own passages, "By Jove, that is a stroke of real genius." In this respect, Hunter will not compare favourably with some far below him in scientific rank. His work, in order to be fully appreciated, must be studied throughout. It is not, of course, of uniform excellence. But Hunter's fame does not rest altogether on any particular part; indeed, it may be said that any particular part might be withdrawn without any material loss to our estimate of his power. We might select examples of it to illustrate his ability in this or that direction—as, for instance, his skill in inquiry, to his researches on the increase of temperature in inflammation, and his experiments on the transplantation of the cockspur, and on the growth of bones; his sagacity, to his inference, from the character of their contractility, that the arteries are muscular; the soundness of his judgment, to his reflections on the coagulation of the blood. But I venture to think that no separate fraction of his work will enable us to grasp his conception of the plan on which surgery should be studied, or the progress which, in a few short years, he actually made in its execution. It is only after a review of the whole of his vast labours in their mutual relation—not merely after a study of the merits of his numerous papers, each taken by itself, but in an attempt

to apprehend the scheme to which, as it appears to me, all his labours were subservient—that we are, in any measure, able to realise the strength of Hunter's genius.

Then, as the chief merit of his work is not of a character to catch at once the eye, even of one who searches for it, so his subject is not one of widespread or popular interest. I can well imagine that, of all men who have achieved greatness, Hunter requires to be studied with most diligence. The more so because of the absence of all literary skill. And there can be no doubt that he shared the fate of all those who have been, like him, in advance of their time. He was so far beyond his contemporaries as to be, for the most part, out of their reach, and therefore they left him alone. And even his successors have not always found him out. It may, indeed, be said to have been almost by an accident that in association with the possession of his Museum we have periodically a festival in honour of his memory. Yet, even with all this, how much time is devoted at the present day to the study of his works? Nay, dare I ask the further question here, Can every one of us who call ourselves surgeons say that he has read them?

Such then, at least in the eyes of one who, though from afar, has long and earnestly looked up to him, was John Hunter. Beyond all cavil, if the word have any meaning for us, a man of genius; a man supremely endowed with power and faculties for the discovery of truth. With little education at the outset of life, without the advantage of the schools, he found himself face to face with the deepest and most mysterious problems of Nature. And he was forthwith able to take full measure of the magnitude of the task. It seems never to have occurred to him that he could snatch an answer by surprise; that a solution could be reached by any short or sudden means. But his survey assured him that upon one plan only, but by that abundantly, could success be made certain. So with patience, which of itself has been called genius, he went back to the beginning. It was genius, too, and that of the highest order, to discern at so vast a distance where that beginning lay. But there he placed himself, and from that point went forward only when he had made each footstep sure. Who shall say that his imagination was not fertile or that he faltered in the use of it? Yet no seductive theory tempted him into undue haste; and though sometimes drawn aside by a specious speculation, he seems hardly ever to have been lost in an unsound conclusion. And when he fell, the treasures he had won were found not only in the multitude of facts he had garnered, or even in the principles, which by virtue of the facts he had discovered were made plain; but also in the very plan and purpose of his work. For from the height on which at length he stood, not only can the path he trod be clearly traced, but the highway thenceforward is disclosed. So is the greatness of John Hunter to be estimated, not only by what he discovered, but rather by the lesson and example of his work. Truly it may be said of him that he did much. Truly it may be said of him that he showed how much more is to be done.

"He, being dead, yet speaketh"—still speaks to us as no other man before or since has spoken. But when and where can his voice be heard most plainly? Are the spirits of those who have shaken off "this muddy vesture of decay" permitted to revisit the scenes of their earthly labours? Can they still be with us on our way? If the soul of this mighty son of science is ever in our midst, surely his favourite haunt must be now within these walls—in the Museum which will soon almost surround us—at once his most graphic and glorious monument. The memory of Hunter, like the memory of the greatest men of every age, is imperishably enshrined. Art, in her noblest efforts, has striven to make his form familiar to us. His name is stamped in indelible characters on the records of human progress. But, before all, he lives in and draws the breath of life from his own immortal works; and of these, none can be so truly a memorial of the very man as this; no other can so resemble him, can possess so much of him, can tell so fully of what he was; can so perpetuate him in the vast store of facts, in the purpose for which they are set forth, in the illustration of principles, in the suggestion of truths beyond those it can show, above those it can reach; in all this, I say, no memorial, however majestic, can rival our Museum. The foundation of this with his own hand and his whole heart he laid; it has grown, and still is growing, from his strength, and it must be made for ever worthy of his name.

Harveian Lectures
ON
CANCER OF THE UTERUS.

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LECTURE III.

(*Concluded from page 303.*)

MICROSCOPICALLY, there are two forms of cancerous disease of the body as of the cervix—adenoma and true cancer. The changes in the glands in adenoma are of two kinds: the cells may retain pretty much the character of the epithelium of the glands in health, or they may be somewhat smaller, but regularly formed, or they may be larger. Dr. Matthews Duncan first described a case of adenoma of the body of the uterus; the disease was polypoid, and was removed. In true cancer, the cells lose their shape, becoming angular, many-nucleated, and fill the lumen of the glands. The changes often call to mind scirrhus; and Mr. Stanley Boyd, after examining such a case for me, and finding in the growing part that the disease grew from the glands, suggested that all cancers of the body were columnar epithelioma. This has been shown to be so; for of all the cases examined by Ruge and Veit and myself there was no instance in which the disease grew from anything but the epithelium of the glands or of the surface. The direction which the growth takes is similar in some respects to that taken when it attacks the cervix primarily. It involves the whole surface of the body, but tends to respect the cervix. In the later stages, however, it passes beyond the inner orifice and attacks the cervix, and extends down as far as the os externum. It spreads deeply, involves the muscular wall, and may pass through it, giving rise to inflammatory exudation on the peritoneal surface and adhesions to neighbouring organs, and then it invades the adherent parts. In one of my cases it had opened the intestine; in another it had all but caused a fistula between the small intestine and uterus; and in one it had passed through the uterine wall into the broad ligament, where it had formed a considerable tumour. The glands affected are those in the broad ligament and those along the spinal column. Secondary deposits may be present in many organs—as the lungs, liver, and kidneys. Its structure is always glandular.

In all my cases the disease began after the menopause. One patient was fifty-three years of age, one fifty-four, and one sixty-three. Of Ruge and Veit's cases two were under forty, the youngest being thirty-two. One was between forty and fifty, six were between fifty and sixty, and seven were between sixty and seventy. So that the disease is rare under fifty and before the menopause, and about as frequent between fifty and sixty as between sixty and seventy.

With regard to childbearing, five women had never been pregnant, four had had one child, and nine had been pregnant twice or oftener. So that we find thirteen out of eighteen had been pregnant and five had not, showing a much larger proportion of sterile women suffering from cancer of the body than from cancer of the cervix.

Hæmorrhage is the symptom which usually attracts the patient's attention and points to the existence of the disease. After the menopause bleeding sets in, and frequently returns at tolerably regular intervals, and women think that menstruation has returned. It is often profuse, but sometimes only slight. It is said to increase as the disease progresses. It is, however, not characteristic, for it is present in the endometritis of old age, and in certain forms of ulceration of the cavity of the body called lupus. There is generally present an offensive discharge.

Pain is a common symptom; and in some cases it comes on at stated hours and lasts for a longer or shorter time, and is of great severity, as was pointed out by Simpson. It is believed to be due to contraction of the uterus. In all my cases cachexia was present in a marked degree.

I regret to have to pass over these matters so briefly, but it appeared to me that the questions I have discussed in the previous lectures are of far greater importance in their bearing upon the great aim of practitioners than the

enumeration or the discussion of symptoms to be found in all works on the diseases of women, and I therefore felt it necessary to devote most of the time at my disposal to them. I must now point out the bearing of what I have already said upon treatment.

I do not propose to discuss the palliative treatment of cancer of the uterus. With this you are all well acquainted from experience in your own practices. It is the common property of all practitioners, and is in the main fully given in all works on medicine, and the part of it which is specially applicable to cancer of the uterus is given in all works on the diseases of women. It consists mainly in the relief of pain and the practice of cleanliness, while in some special cases particular means may be called for to arrest hæmorrhage and other discharges. These I pass by, and proceed to discuss the radical methods of treatment which have been practised during the last ten years. These methods are two—the supra-vaginal amputation of the cervix and the total extirpation of the uterus. Freund of Strasburg introduced or reintroduced total extirpation into practice some dozen years ago. He practised it by abdominal section, and the results of this method proved disastrous, the mortality from it amounting to 72 per cent. at least. This method was modified by Czerny and others, who amputated the cervix by the vagina first, and then performed abdominal section to remove the remainder of the uterus. Schroeder subsequently described what is known as the vaginal method, in which the whole of the organ is removed through the vaginal canal; and by this method much greater success has been obtained, so far as the immediate mortality after the operation is concerned, than by the abdominal, for about 72 per cent. of the cases operated upon recover from the operation.

Amputation of the cervix has been practised for many years, but only recently in the way it is done now. I am not going to describe these operations further than I am obliged to, but I want to show the bearing of what I have told you in these lectures upon the application of the two methods—total extirpation and partial extirpation of the uterus. That you may follow me, I must remind you of what I said about the sites of origin of cancer and the lines of its growth. And, in the first place, cancer of the vaginal portion begins in the squamous epithelium; it is superficial, and remains superficial for a long time; it spreads towards the vaginal vault and along the vaginal walls superficially. In these cases the whole of the disease, provided it is limited to the uterus, can easily be removed; indeed, in most cases, if the lower half of the cervix be removed, the disease will be extirpated from the uterus. The difficulty arises after the disease has spread beyond the limits of the portio vaginalis into the vaginal vault, and lies in the obstacles to the removal of a large superficial area, owing to the conformation of the parts—the near proximity of the bladder and ureters especially. Many cases have been cured by amputation of the cervix, or of a portion of it, with the écraseur. Recurrence takes place superficially at the edge of the cicatrix, and not in the deeper structures, and consequently no advantage would be gained by total extirpation of the uterus.

In the next place, we have to discuss the applicability of total and partial extirpation to cases of cancer of the cervix proper, first of all, in the light of pathology. In the last lecture I pointed out that cancer may begin in the cervix in two situations—in the lower part near the external orifice, or in the upper part near the internal orifice. I showed that the tendency of the disease was to grow downwards towards the portio vaginalis, and outwards towards the parametric connective tissue. It does not spread upwards into the body of the uterus except in rare instances and in the late stages of the disease, when no operation can be undertaken with any hope of effecting a radical cure. Before it has involved the whole of the cervix, it has probably in some places invaded the parametric tissues, and this is the case long before the body is attacked. Under these circumstances, what are the advantages, if any, of total over partial extirpation? The lines of incision in the vaginal walls can be made in the same situation in amputation of the cervix as in the operation for total extirpation, so that in this respect total extirpation has no advantage over the minor procedure. Then, in both operations the dissection in front is made in the cellular tissue between the uterus and the bladder. It is generally advised to tear through this tissue after the vaginal walls have been cut through. The dissection can be made in both operations as far as the reflexion of the peritoneum from the uterus on to the bladder. On the sides, again, the dissection can be made at the same distance from the uterus in amputation of the cervix as in total extirpation. With regard to the dissection posteriorly the proceeding is usually somewhat different in the two operations. In the minor operation the vaginal wall is divided as far as the peritoneum, but the peritoneum is not opened; it is peeled off up to the point where it is firmly adherent to the wall of the uterus. In the major operation the peritoneum is opened over the place where the incision is made in the vagina. This in many cases—cases in which the disease has involved the posterior wall of the cervix deeply, and invaded the parametric tissue—is a distinct advantage. It is, however, an advantage which can be made available in the minor operation; for in amputation of the cervix the peritoneum is often deliberately opened, and this does not appear to add greatly to the risk incurred. As far as we have gone, then, total amputation presents no advantage over supra-vaginal amputation.

But what are the facts with regard to the entire removal of the disease from the uterus itself, and the prevention of recurrence. How much of the uterus can be removed by the minor or less severe operation? Can enough be removed to ensure prevention of recurrence? In reply to the first question, I say the whole of the cervix can be easily removed, and a great part of the body can also be removed. When the reflexion of the peritoneum has been reached, the dissection can be carried up in the uterine wall near the peritoneal surface, and a cone-shaped piece of the body reaching up to the fundus can be cut out. This was done in Case 16. In that instance the mucous membrane of the fundus was removed, together with that at the internal orifices of the Fallopian tubes. This was done without injury to the peritoneum; so that the entire uterus can be removed, except a shell of the upper part of the body. But is this sufficient to prevent recurrence? Is the risk of recurrence greater or not when a part of the uterus is left behind? I believe it is not any greater, and on grounds which appear to me to be sufficient; for in six cases in which recurrence took place, in four the stump remained healthy, and in one it was superficially and clearly secondarily affected. In all recurrence took place in the parametric tissue, and in four in that only. This evidence points clearly to the possibility of extirpating cancer entirely from the uterus by supra-vaginal amputation, and shows that, in so far as the prevention of recurrence in the uterus is concerned, total extirpation of the uterus presents no advantages over partial amputation. But how about recurrence in the parametrium? Will total extirpation help us to prevent this mode of recurrence more than amputation of the cervix? I think not. I have shown that the line of dissection around the cervix up to the level of the inner orifice or the reflexion of the peritoneum is the same in both operations; that the peritoneum can be and often is opened at the same level frequently in amputation of the cervix, as in the operation for removal of the whole uterus; that, in fact, the tissues in the area of recurrence are cut through in the same planes in both operations, and therefore that one presents no advantage over the other. It has been suggested, however, and I believe practised, to remove a portion of the bladder when the cancer has invaded the connective tissue between that organ and the uterus. This could be done in the minor operation without increased risk; but I imagine that it would greatly enhance the danger of the operation for total removal of the uterus. So that, if anything is to be gained by such a procedure, this gain would be in favour of the minor operation. I doubt, however, whether such a proceeding would be likely to possess any advantage over the ordinary method.

In so far, then, as the natural history of cancer of the portio vaginalis and of the cervix throws light upon the value of operations for its cure, it appears that supra-vaginal amputation of the cervix is quite as satisfactory an operation as the removal of the entire uterus. But what does the experience of operators tell us on this point? Does it accord with the conclusions we have arrived at upon pathological grounds? A large number of patients have been operated upon for cancer as well as for other conditions, and the results of the operation have been recorded in societies or published in journals soon afterwards, and long before the cases were completed by observation of the permanent results. All these cases are absolutely of no value for our purpose. I cannot conceive any good object in operating upon a patient

on a Monday and reporting the case on a Thursday and then burying it out of sight for ever. The cases which have been watched for years after operations for cancer are comparatively few. I do not profess to know them all, and I shall therefore take the results obtained in the Vienna Hospital published by Pawlik and those of Schroeder published by Hofmeier. They are the largest and most complete. Those of Martin of Berlin and those of Fritsch of Breslau are for my purpose and for purely scientific purposes valueless, because the cases had not been watched for a sufficient length of time to determine whether recurrence took place or not. They are useful for the purpose of estimating the mortality of total extirpation only.

Recurrence may take place early or late, but if a considerable time has elapsed before its appearance it may be inferred that the reappearance is not a recurrence, but a new development; for just as a new development of cancer may take place in a part of the body quite independently of cancer in another part, so may a new growth appear in the stump of a uterus whose cervix had been amputated for cancer independently of the cancer which was removed. I consider, and I believe justly, that if recurrence does not take place in the course of two years a cure has been effected, and that should the disease break out after the lapse of that time the new growth is not a real recurrence, but a new development. Bearing this in mind, we find that Pawlik reports thirty-one cases of cancer of the portio and cervix which were cured by amputation of the cervix. One hundred and thirty-six cases were operated upon. Of these thirty-three remained in good health at periods varying from one to twenty years after the operation. Pawlik operated by means of the galvanic écraseur, and opened the peritoneum thirty-nine times. Of 105 partial operations performed by Schroeder ten died; the fate of seven is doubtful; recurrence took place in forty-three during the first year, and forty-five remained well; thirty-one remained well at the end of two years; twenty-three remained well at the end of three years; one had died of cancer of the bones, one of cancer of the ovary, and three had recurrence, the state of one was doubtful, and two were lost sight of. If we now compare this result with that of total extirpation in Schroeder's hands, we find the uterus extirpated during the same period in forty cases, with ten deaths. Recurrence took place in fifteen during the first year, and one was lost sight of, leaving fourteen healthy at the beginning of the second year. Recurrence took place in seven during the second year, and in one case the point was doubtful. Four were known to be healthy. We have therefore about 30 per cent. in good health after partial operation, and only ten after total operation—that is, of those operated upon; and nearly 35 per cent. of those who recovered after partial operation, and 13 per cent. after total extirpation. It should not be forgotten that these cases of total extirpation were cases of more advanced disease than those in which partial extirpation was performed; or, at least, that they were cases in which the disease had involved the uterus to such an extent that partial amputation was thought to be insufficient.

Hofmeier, who reports Schroeder's cases, divides cancer of the lower segment of the uterus into cancer of the portio, cancer of the mucous membrane of the cervix, and cancer of the cervical tissue. For cancer of the portio he advocates amputation of the cervix; for the other forms, total extirpation of the uterus. All the cases in which he had observed a long and lasting recovery after total extirpation were cancer of the mucous membrane. The results obtained in cases of cancer of the cervical tissues are much more unfavourable. He states that "this form of cancer is not discovered until it has existed for a long time, until ulceration has taken place, total extirpation is indicated for the disease may have extended into the body. The prognosis is very unfavourable, and recurrence is most frequent in them." I cannot accept Hofmeier's classification of cancer of the lower segment; but it should be said that his paper is purely clinical, and not in any sense pathological, so that I lay but little stress upon his division. He does not describe the seat of the recurrence, but as the whole uterus was removed it must have taken place in the parametrium, and in so far his observations are in accord with mine; and as the recurrence takes place not in uterine but in connective tissue, it cannot be said that total extirpation is indicated in these cases. Moreover, he shows that of the forty-three cases in which recurrence took place during the first year after partial amputation, in only two did the recurrence take place in the uterine stump. In all the others its seat was the cellular tissue, and therefore, as a rule, total extirpation is not indicated. Clinical experience appears, therefore, to point to the same conclusion as pathological investigation—that is, that in cancer of the portio vaginalis and cervix total extirpation of the uterus possesses no advantages over supra-vaginal amputation of the cervix, because the tendency of the disease is, not to invade the body of the uterus, but the parametric tissues. In cancer of the uterine body there is but one operative procedure which holds out any hope of a radical cure, and that is total extirpation.

There is one other question in connexion with the operative treatment of cancer of the uterus upon which I wish to make a few observations, and that is the indication for operating. All cases of cancer should be operated upon provided they are met with at a period sufficiently early to justify the hope of effecting a radical cure. But what are the physical signs which justify this hope? The pathological condition which justifies it—be the cancer in the portio vaginalis, the cervix, or the body—is that the disease has not passed beyond the uterine tissues. This, however, is not easily discovered either before or during the operation. Frequently, indeed, the after-results prove that it was too late, even in cases which appeared to be favourable. The physical signs generally relied upon are mobility of the uterus, absence of induration around it, and absence of affection of the glands. In endeavouring to establish these points, the examination should be made under an anæsthetic, and the whole pelvis should be explored by the vagina and by the rectum. In spite of every care, however, clinical investigation may mislead, because the disease may have passed beyond the limits of the uterus and yet give rise to none of the physical signs mentioned. The pathological condition present is most easily established by clinical examination in cancer of the portio, for when the disease has reached the vaginal vault it gives rise to superficial induration at the place invaded, and this is more easily discovered than when induration of a slight degree is present in deeper tissues. In such cases, and indeed in all cases, the rule should be to make the incision in the vaginal wall wide of the indurated part. In this means alone lies any hope of preventing recurrence.

In cancer of the cervix proper the investigation is much more difficult, for the uterus may be freely movable, the mobility of the organ may be unimpaired, no indurated tissue may be discovered, and no enlarged glands may be found, and yet the disease may have passed into the cellular tissue around the cervix. I have seen several such cases, and in them the tissues through which the incisions were made appeared to be healthy. I know of no way in which the difficulty can be overcome. Coarse induration can be readily discovered—that points to an advanced stage of cancer; but the commencement of infection of the parametric connective tissue will escape the most sensitive and cultivated touch. If the parametrium is free, no anxiety need be felt about the degree of extension of cancer upwards towards the body. It can be entirely extirpated in that direction. The difficulty is to extirpate it in a lateral direction, according to both pathological and clinical research. The difficulty is sometimes just as great in cases of cancer of the body. The tendency in these cases is to invade the broad ligaments and peritoneum or adherent intestines. I have seen one case in which the uterus was movable without surrounding induration or large glands, and yet the fundus was adherent to a coil of small intestines, and the disease had invaded the wall of the intestine and almost formed a utero-intestinal fistula. This patient was examined under ether, and yet the condition escaped detection. In spite of these difficulties, and in spite of recurrence, the operative treatment of cancer gives in many respects satisfactory results, and this is especially true of cancer of the portio vaginalis and cervix. Sometimes permanent cures are effected, while in a large number a respite for one or more years is given. In Schroeder's cases the respites were as follows: Of 105 partial operations, 10 died, the fate of 7 was doubtful, and recurrence took place in 43 during the first year; so that 45 had a respite of one year, 41 of eighteen months, 31 of two years, 27 of two years and a half, 23 of three years, 17 of three years and a half, 10 of four years, 7 of four years and a half, 7 of five years, 3 of six years, and 1 of seven years. Besides these cases, which remained under observation, many were lost sight of and their fate was not known. Of 40 total extirpations 10 died, 14 had a respite of one year, 8 of eighteen months,

4 of two years, 2 of three years, 1 of three years and a half, and 1 of four years and died of apoplexy.

I thought at one time that recurrence caused more and earlier suffering than the primary disease, because it affected the deeper tissues sooner than the primary disease would have done, but a larger experience of such cases has convinced me that I was in error, and that the pain depends on some peculiarity in the patient or in the disease, for many recurrences are painless. I cannot speak of the duration of the disease after recurrence. I have not a sufficient number of cases, but I have seen it last from four to eighteen months. It is not impossible that a more careful study of the pathology and natural history of cancer of the uterus will help us much further in its diagnosis and treatment, and the earlier we are enabled to make the diagnosis the more successful will our treatment prove. No haphazard and blind procedures of treatment will prove of any avail; the only method which can give us a sound and firm basis upon which to build is patient study in the laboratory as well as at the bedside; and although I would in no way depreciate clinical research, yet I cannot help thinking that the investigations conducted in the laboratory, in the present state of our knowledge, are the more likely means to give us light upon cancer of the uterus—to elucidate the laws which govern its development and growth, as well as those which should guide us in our treatment.

CASES OF GALL-STONES, WITH REMARKS.[1]

BY J. S. BRISTOWE, M.D., LL.D., F.R.S.

THE subject of gall-stones is always one of great practical interest, but it is much too large to be dealt with exhaustively in a short paper. I prefer on this occasion only to bring under notice two cases of special interest which have come under my care during the last year or two—cases which illustrate in different ways the phenomena which attend the escape of gall-stones by ulceration from the cavities or channels in which they are formed. The first case is one in which jaundice (due to partial obstruction to the flow of bile from the liver) of twenty years' duration was followed by the formation of an abscess in the lower part of the right side of the abdomen, and the escape, together with pus, of large quantities, not of true gall-stones, but of biliary gravel. The second case is one of the escape through an ulcerated opening of a large gall-stone from the gall-bladder into the duodenum, and of death from consequent obstruction of the small intestine.

CASE 1. *Gall-stones and gravel causing suppuration, and discharged through the abdominal walls below the level of the umbilicus.*—Ann A——, unmarried, a governess, aged thirty-eight, came under my care on May 15th, 1884. Had always had weak health. Had rheumatic fever when six years old, and when twenty a second attack followed by typhoid fever. As long as she could recollect she had been liable to "spasms" commencing in the left hypochondriac region, and extending thence obliquely into the right lumbar region. Had been jaundiced for twenty years, the jaundice varying in intensity, but never disappearing. Her illness dated from the previous October, when she had an attack of "spasms" lasting for ten days, which left her very weak. After this she first discovered a small lump on the right side of the abdomen. This tumour had been enlarging ever since. Owing to constant pain in the situation of the tumour and to debility, she took to bed, and only left it in order to come from the country to the hospital. The journey caused great aggravation of pain.

The patient was spare, but not markedly emaciated; pale, and quite obviously, though not deeply, jaundiced. The conjunctivæ were yellow. The abdomen was not generally distended or hard; but on the right side, extending vertically from a little above the level of the umbilicus above to the groin below, transversely from the left of the mesial line to the anterior superior spine of the right ilium, and having a superficial extent about equal to that of the palm of the hand, was a hard mass, the edges of which were not very well defined, and which appeared to be incorporated with the deeper parts of the anterior abdominal walls. It did not move with respiration or under the skin; but it moved with the movements of the abdominal walls. It was slightly nodulated, the more prominent parts seeming to infiltrate the parietes as if coming to the surface. It was dull on percussion, and no resonance could be obtained between it and the liver. She complained that it was tender, and after it had been handled she suffered from much lancinating pain in it. Tongue clean, appetite poor; thoracic organs all healthy. Catamenia regular; urine of specific gravity 1030, and containing neither sugar, albumen, nor bile. No enlargement or disease of any organ within the abdomen could be detected; and at this time it was uncertain whether we had to do with a malignant tumour invading the abdominal walls or a suppurating inflammatory mass. Against the latter view were the facts that the tumour had been growing for six months, that it was uniformly hard and free from all sense of fluctuation, and that the temperature was scarcely above the normal.

During the ensuing twelve days the patient's general health improved; and, indeed, on the whole she seemed fairly well, excepting that she suffered at times from severe pain in the tumour, which had to be allayed by morphia injections. During this time, however, the tumour got more tender, and therefore more difficult to examine; it enlarged somewhat; it became more definitely adherent to the skin at two or three points, and the skin in these situations presented a blush of redness. At length one of the prominences became somewhat yielding, and, although it did not fluctuate, it was thought well, on consultation (on March 27th) with Mr. Sydney Jones, to make an exploratory puncture. A small incision was made, and a few drops of thick pus oozed away. A probe was then inserted for a couple of inches or so. It passed pretty easily in two or three directions, not into any definite cavity, but apparently through tissues infiltrated with pus. A deep incision about two inches long was then made; and thence a considerable quantity of thick pus escaped.

Up to this time the temperature, though generally normal, had been in the habit of rising occasionally to 100° or 101°; but after the operation all traces of fever disappeared; the health and appetite improved; she lost the abdominal pain; a slight discharge of pus continued; and the tumour diminished markedly.

On the morning of June 3rd, on removing the poultice, several rounded black bodies, varying from the size of a coriander-seed downwards, were for the first time found in the discharge. These were rough on the surface, and readily crumbled between the finger and thumb into a coarse powder. They were insoluble in ether and in chloroform, and gave the reaction of bile when treated with nitric acid; they were obviously biliary concretions. From this time scarcely a day passed in which a greater or smaller number of biliary concretions failed to be discharged. They varied from mere dust to friable masses as large as a small pea, and, like those first observed, were always black and structureless, and formed essentially of biliary colouring matter.

As (although the patient's health continued to improve, and the abdominal pain, tenderness, and lump had all much diminished) the discharge of pus and of biliary concretions continued, it was determined at a second consultation with Mr. Jones to enlarge the incision (now partly healed) in the upward direction towards the gall-bladder, in order, if possible, to remove the accumulation of concretions which were obviously retarding the patient's recovery.

On June 24th the patient was put under the influence of ether, and Mr. Jones passed a probe through the wound upwards and to the left to a point two inches to the right of the umbilicus and half an inch below it. He then slit up the sinus, and from its upper point passed his finger into a prolongation of it, which extended upwards in the presumed direction of the gall-bladder. The tissues around were dense and cicatricial in character; and in the sinuses themselves, and mainly in the upper one, were found large numbers of friable calculi and much biliary gravel of the same kind as those that had been previously discharged. The wound and its diverticula were washed out freely with a weak solution of carbolic acid, and a drainage-tube was then inserted. The patient took the ether badly, became very blue during the operation, and at the end of it almost ceased breathing, and had to be revived by artificial respiration. She fainted several times during the evening, and afterwards suffered from sickness. A good deal

[1] Paper read at the meeting of the Hertfordshire District of the Metropolitan Counties Branch of the British Medical Association, Nov. 24th, 1886.

of biliary fluid was discharged from the wound in the course of the afternoon and evening.

For about a fortnight after the operation she continued very weak, suffered a good deal from pain in the wound, and in the abdomen in its neighbourhood, and often fainted two or three times a day. Then she began to improve in health manifestly, and to gain flesh and strength, and on August 10th sat up for the first time. After this her progress towards health was rapid, and almost uninterrupted.

Notwithstanding the great amount of calculous matter removed at the operation, large quantities of calculi, varying from rounded aggregates a quarter or one-third of an inch in diameter to grains like those of ground pepper, escaped daily from the wound with the fluid discharge. From twenty-five to fifty were not unfrequently discovered daily. The abdominal hardness gradually decreased, and the wound healed excepting at its upper point, where a drainage-tube was retained, and the fluid discharge escaped. The yield of stones diminished latterly, and none were observed after Sept. 19th. The sinus remained open, however, and discharged a good deal of thin colourless fluid as long as the patient remained in the hospital.

On Sept. 10th she had an attack of severe lancinating pain in the left hypochondrium, which lasted for about an hour and a half, and was followed by diarrhœa, and it was thought some increase of jaundice. She said the attack was exactly like those to which she had been liable.

The patient left the hospital on Sept. 30th, still with a small weeping sinus, but in good flesh, much improved in strength, and able to walk about, healthy in appetite, free from abdominal pain, and cheerful. But she was still jaundiced, as she had been all along. The skin had a pale brown tint, and the conjunctivæ were distinctly yellow. But there was not, and there never had been, any bile in the urine. The concretions discharged from the wound on several occasions were very carefully examined, both chemically and microscopically, and proved to consist almost exclusively of biliary colouring matter. I have not seen, but have several times heard of, the patient since she left the hospital, and believe that she remains well.

It is, of course, not uncommon for ulceration to take place in the gall-bladder, in consequence of the presence of stones in it, and for these to be discharged from an ulcerated opening over the site of the inflamed cyst. But the case just narrated is not an ordinary one of this class, because: first, there was a history of biliary obstruction of twenty years' duration, which was not removed by the treatment which relieved the patient in other respects; second, the local evidences of inflammatory thickening and suppuration appeared at a considerable distance from the situation in which they might have been expected to show themselves; and third, the concretions which escaped were not ordinary gall-stones, but amorphous granules of biliary colouring matter.

Abscesses arising in the abdomen not unfrequently present in situations which are remote from their seat of origin, and especially have a tendency to gravitate into the venter ilei or pelvis. And more than once I have seen an abscess of the liver which had communicated with the cavity of the lesser omentum, or had opened into its substance, lead to considerable inflammatory thickening of the implicated tissues and their permeation with sinuses, to adhesion between them and the abdominal walls, and finally to perforation of the latter at or near the umbilicus. In this case the inflammatory phenomena corresponded in the main with those just described; and I am inclined to think the abscess had been conducted downwards by the tissue of the great omentum, and that the peculiarities which were observed were largely determined by this circumstance.

The concretions were amorphous, and presented a vitreous fracture; and, if cholesterine was present in them at all, it was present in exceedingly minute quantities. I never saw such concretions in the gall-bladder, and am inclined to think they are never found there. They were such concretions, however, as not unfrequently form in the gall-ducts, and tend to coalesce or grow into calculi, which become moulded to the channels in which they lie, and usually present a more or less tuberculated surface. I am consequently inclined to think that in this case the gravel came, not from the bladder, but from the ducts; and that the abdominal abscess originated in ulceration of one of the ducts, probably the hepatic or common duct.

The long duration of jaundice in this case cannot, I think, be directly explained by the passage of gall-stones, unless, indeed, as sometimes happens, the irritation caused by them determined the formation of a stricture at the point at which the common duct opens into the bowel. But if such a stricture had been an early result of the passage of a gall-stone from the gall-bladder, one might have expected that the passage of subsequent stones from the gall-bladder into the bowel would have been prevented, and that their accumulation in the common duct would long ago have led to absolute obstruction, and to a fatal issue. But I could not satisfy myself that the spasms to which the patient was liable were typical attacks of gall-stones, or that there was any clear evidence that the jaundice commenced with such an attack. I am inclined, on the whole, to think that her illness began with a seizure of catarrhal jaundice, which induced permanent thickening and stricture, but not complete obstruction of the lower end of the common duct, and that, following upon that, permanent yet variable jaundice supervened, associated with general dilatation of the hepatic ducts, and tendency for the retention of bile in them, and for the deposition of its solid constituents in a granular form. If this view be correct, the spasms might be referred to the occasional passage of gravel.

I recollect a patient of mine, a middle-aged man, who was suffering from jaundice of some years' duration, but who still passed bile in variable quantities into the bowel, and died ultimately from profuse hæmorrhage (I think from the nose), whose jaundice we found after death to have been caused by such a stricture as I have assumed to exist in the present case, a stricture barely admitting the passage of a very fine probe.

I may here add a remark with regard to the abundant presence of cholesterine in gall-stones formed in the bladder. The general belief, I think, is that this substance is precipitated from the bile around solid nuclei, the origin of which I need not now consider. But cholesterine forms a very minute proportion of the solid constituents of the bile; and it is odd, therefore, that the great bulk of these calculi should consist of cholesterine with only a trace of other bile constituents, and sometimes even of pure cholesterine; and it becomes especially odd when we bear in mind that biliary concretions formed in the ducts generally consist of the solid constituents of the bile, and present little or no cholesterine. Many years ago I examined a patient in whom there was a contracted gall-bladder with extremely thick walls. Embedded in these walls were a considerable number of cavities varying between the size of a pea and that of a bean, which were evidently dilated mucous crypts. And within each one of these were large crystals of pure cholesterine. These were colourless, rhomboidal, varied from $\frac{1}{4}$th to $\frac{1}{2}$th of an inch in breadth, and were about the $\frac{1}{15}$th of an inch thick. I was led from the facts of this case to assume, and I am inclined to think, that the bulk of the cholesterine in gall-stones formed in the gall-bladder is derived, not from the bile, but from the secretions discharged from the mucous surface.

CASE 2. *Obstruction of ileum by a gall-stone; death; necropsy.*—Ann S——, a married woman sixty-five years of age, was admitted under my care on March 24th, 1885. Her history revealed nothing of any importance, excepting that she had had no symptoms at any time pointing to affection of the liver or its excretory apparatus. Her illness began on March 20th with retching and vomiting, which continued, with varying, but on the whole increasing, severity up to the time I saw her. The vomit during the last two days had been offensive. The bowels had not been relieved for two or three days previously to the onset of her illness, and they had not been relieved since. She had passed little urine, and passed it only on one occasion since the 22nd. It was then small in quantity, high-coloured, and turbid. She is said to have had three fits on the morning of the 23rd, in which she became cold and unconscious, but was not convulsed. She did not seem to have had any pain.

On admission she appeared to be well nourished, but her face was pinched and anxious-looking, and her eyes were sunken; her tongue was thickly furred; her abdomen was full, but flaccid, and free from tumour, tenderness, and pain; she had no hernia; the heart and lungs and her temperature were normal. She was admitted in the evening, and the next morning (March 25th) the following notes were taken:—"The patient slept well till 4 A.M., after which she was restless; has vomited much black grumous-looking fluid, and had some hiccough; had an enema last night, which did not act; has not rambled. She is now very

weak; still suffers from sickness, and complains of pain across the upper part of the abdomen; she looks vacant, and is fretful. Pulse 88; temperature 96·4°." Later in the day (thirty hours after admission) she passed for the first time a few ounces of urine; it was high-coloured, presented a trace of albumen and a deep indigo reaction, and its specific gravity was 1030. Her temperature at this time was normal, her pulse 90, feeble and regular, her tongue dry and thickly coated. The sickness continued.

March 26th.—Vomiting ceased at 10 P.M. yesterday; she slept till 3 A.M., after which she rambled a good deal. Now she seems feeble-minded and incapable of concentrating her thoughts or of recollecting. She complains of feeling sick, and of pain in the epigastrium on breathing deeply, and is extremely feeble. Pulse 88, weak; temperature 96·4°. A catheter was passed yesterday evening, and twenty ounces of urine were withdrawn. She died in the course of the morning. She was treated mainly with opium.

Necropsy.—On opening the abdomen, the stomach and small intestine in the greater part of its length were found moderately distended, but the last few feet of the ileum were contracted to the thickness of the little finger. The duodenum was adherent to the gall-bladder and liver in the neighbourhood. The gall-bladder itself was much contracted and difficult to make out. Its cavity communicated by an irregular orifice with the duodenum. The stomach and upper part of the bowel contained thin stercoraceous fluid. In the duodenum were two small faceted gall-stones, and one or two other similar ones were discovered lower down. Between six inches and a foot above the spot at which the contraction of the ileum commenced was a rounded gall-stone about as large as a walnut. It filled the bowel in this situation, but was not impacted in it. The intestines above the obstruction presented small areas of inflammation, as if the stone had been impacted from time to time in its course downwards, and had thus irritated the mucous membrane. The contracted portion of bowel and the large intestine contained mucus only. All the other abdominal viscera and the peritoneum were healthy. The lungs were deeply congested and œdematous. The heart was soft, and there was a good deal of atheroma of the mitral and aortic valves (which, however, were competent), and of the aorta.

The case just narrated is, I take it, a typical example of obstruction of the bowel by a large gall-stone. It is noteworthy, that (as I think usually happens in such cases) there was nothing in the previous history pointing to the passage of gall-stones; that the stone, although it had clearly caused obstruction of the bowel, was scarcely so large, one might have thought, as to forbid its ready transit and ultimate escape from the anus; that there was never any evidence—such as pain, tenderness, or distension—of the presence of abdominal inflammation; and that not only was there absence of fever, but the temperature was generally subnormal. The patient died apparently partly of asthenia and partly of collapse, determined by the concurrence of inflammation of the mucous membrane of the upper part of the small intestine, with obstruction of bowel, vomiting, and incapacity to take nourishment.

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TRANSPLANTATION BY EXCHANGE.

BY C. B. KEETLEY, F.R.C.S.,
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THE title of this paper is the name I would apply to an operation by which two portions of living tissue are made to exchange places. The following case will illustrate the procedure and the kind of circumstance in which it may be advantageously employed.

In March, 1886, a female infant, aged two or three weeks, was brought by a neighbour of its mother's to the West London Hospital with a request that a hairy mole covering nearly the whole of the left cheek might be removed. I explained that the result would be a contracting scar worse than the mole, and sent the child away. Next week the neighbour returned, and said that the mother could not endure the sight of the large mole, and would prefer a scar. I placed the infant's arm against its face, and was rather dismayed to see that all the skin of the outer side of the upper arm, from the shoulder down to the elbow, would be required to replace the mole should I cut away the latter and then fill in the flap by transplantation. Upon reflection, I resolved to *exchange* the hairy mole of the face and the smooth white skin of the arm. The advantages of this plan are obvious, and especially the consideration that the mole would give useful skin for the upper arm; but it will be better to defer enumeration of them till the operation and its results have been described.

On April 2nd, the little patient being anæsthetised, I first thoroughly cleansed and disinfected the cheek and arm with liquid potash soap (Duncan's) and solution of perchloride of mercury, successively. Next I marked out the flaps in the following manner. A straight ink-line was drawn from A to B (see illustration). The arm was then placed in comfortable position, arching upwards over the face and head. The wet ink on the line A B printed a second line on the arm at C D. A paper pattern of the flap to be removed from the face was cut, and with its aid an exactly similar flap was marked out on the arm, so that C D H G on the arm corresponded to B A E F on the face, each letter to each respectively. Though this is a very simple matter, some care is required in practice to avoid confusion. The knives, scissors, sutures, needles, forceps, &c., to be used lay in a tray of carbolic lotion, but were dipped in boiled (not boiling) water immediately before use and replaced in the carbolic tray when not actually in use. The object of this was to take care that no erysipelas or other specific infection should be carried by the instruments, and yet to prevent the flap and raw surfaces from being irritated by the carbolic. The sponges had all

been thoroughly disinfected, although they were now placed in water only. The face flap was reflected first. It included the subcutaneous fat proper, which had to be carefully separated from the cushion of fat which swells out into the middle of the cheek from beneath the ramus of the jaw; and it was necessary also to cut very carefully and *see* everything which was divided near the parotid and some of the branches of the facial nerve. The structures in an infant's face are, of course, comparatively small and near to each other, and the amount of fat is, comparatively, very considerable. Almost all the cutting throughout the operation was done with scissors, and not very sharp ones either. The main object of this was that bleeding might stop rapidly, and thus dry surfaces be obtained speedily—a very important matter in a plastic operation. This object was entirely attained in the case I am describing. The arm flap also included the fat down to the deep fascia. As I thought it would be somewhat difficult to put in the sutures when the arm was up against the face, I applied entirely distinct, but corresponding, sutures to the arm flaps and edges of the arm wound on the one hand, and to the face flap and edges of the facial wound on the other, and afterwards lifted the arm to the head, placed the arm flap in the facial wound and the face flap (containing the mole) in the arm wound, finally using the ready-placed sutures as "tags," which, twisted together each to each, fixed everything with absolute security and accuracy. But this plan, though excellent in suitable cases, was scarcely necessary in this, and was, indeed, a little too elaborate. The angles between the arm and face, near the flaps, were now packed with iodoform gauze,

and the whole arm was most carefully fixed to the head and neck with good strapping. Finally, over sufficient flannel and wadding, the head and thorax and *both* arms were rigidly secured in plaster-of-Paris. The whole had somewhat the appearance of a large egg with an infant's face peering out of a hole near one end and its hips projecting and legs kicking freely out of the other end. The child's conduct showed that it was free not only from pain, but even from discomfort.

The following notes of the after-treatment were made by the house-surgeon, Mr. Harold Des Vœux:—April 9th (seven days after operation): Part of case removed; dressings found to be very offensive. Both flaps looking well, though the face flap is red and the stitches along its anterior border have given way. Dressed as before.—13th: Whole case removed and bases of flaps cut and sutured respectively to face and arm. This, of course, liberated the arm from the head and severed each of the two transplanted flaps from its original connexions, completing the exchange of places. At the lower and outer border the flap upon the face was found to be not adherent and partially redundant, owing to cicatricial contraction of the face wound; it was therefore pared to fit, and re-sutured to the face. Wounds dusted with iodoform; both arms strapped to body to prevent child from scratching the wounds.—20th: The face flap not fitting perfectly in one or two places, it was there refreshed, adjusted, and fixed with fine horse-hair sutures.

The result bids fair to be excellent, though not perfect, owing to the fact that a certain amount of cicatricial contraction had taken place in each wound. I feared this would pull the mouth to one side eventually; but it appears now, nine months afterwards, that this has not occurred. The following account of the present state of the case is written by Mr. C. H. Taylor, house-physician to the West London Hospital, who has just visited the little patient to report on it:—"The child is much fatter and healthier in appearance; the transplanted skin on the face is of the same colour and appearance as the rest of the face; all that is noticed is an incomplete irregular ring of depressions or dimples and linear scars, these being slightly paler in colour than the surrounding skin. At the outer and lower edge nearest the ear are two small patches of mole, one about the size of a pea and the other smaller;[1] they are pale brown in colour, and have a few silky hairs growing from them. The arm is much fatter, and the mole upon it is more raised and movable than it was upon the face, but it remains the same in size."

There can therefore be no doubt about the satisfactory results attained by this mode of operating, which is, to the best of my belief, new. It is obviously a very great advantage to be able to anchor, so to speak, the arm to the head by the strong sutures which unite the former to the transplanted mole. It is thus rendered needless to put any except fine sutures into the face. Secondly, the bases or necks of the two flaps, lying with their raw surfaces in mutual contact, help to keep up each other's warmth and nutrition. Thirdly, not only is the risk of sloughing diminished, but should the part removed from the arm slough, the mole saved from the face is there covering the arm wound with healthy and supple, though discoloured and abnormal, skin. I cannot help thinking that this plan of preserving what might be termed "healthy disfigurements" of the face, such as hairy moles, and *exchanging* them for skin taken from parts usually hidden by the clothes, to be a great improvement on the practice of excising such moles and wasting them.

[1] These small patches lay near the border of the large mole when it was transplanted, and were left behind.

SANITATION AT SHREWSBURY.—The Shrewsbury Corporation at the quarterly meeting on the 14th inst., considered reports of the borough surveyor for a new water-supply and a new drainage system which would carry the whole of the town drainage into the Severn at a point below the town. The water scheme proposed to take the water out of the river above the town, and after filtering it to pump it into a service reservoir, from which the whole of the town could be supplied by gravitation. The estimated cost was £26,000. The sewage scheme would entail, when complete, an expenditure of £16,000, but at present only £7800 of this was to be laid out. Both plans were agreed to.

MINIMA VISIBILIA AND SENSORY CIRCLES.

BY THE LATE BRIGADE SURGEON T. OUGHTON,
ARMY MEDICAL DEPARTMENT.

(*Concluded from p. 310.*)

THERE is an idea of motion when an image traverses the retinal disc of a motionless eye, or when the finger is passed over the surface of the skin; the prevalent doctrine accords the resultant perception to a consecutive excitation of impressional areas. Advantage may be taken of the present opportunity to instance a few arguments justifying the classification of apparent motion with the secondary perceptions.

1. No progressive motion is experienced in a train passing along a dark tunnel, or in a ship's cabin, because the muscular system is quiescent. But our progression when walking in the dark is quite perceptible. How is this? It cannot be due to the tactile impressions made on the feet, even granting them to be unlike, since no idea of motion is presented by a succession of dissimilar sounds, or by the different thoughts of ideation. Neither can it be explained by noting the time that it occupied in each step, since time and motion are not to be confounded (Locke). This philosopher imagines the sun to be a fire lighted in the same meridian every twenty-four hours, and asks whether such a regular appearance would not serve to measure duration as well without motion as with it. No solution is available saving that of muscle-perception.

2. Apparent motion is realised by the aid of the thaumatrope or zoetrope; but it is inconceivable (as with different sounds or thoughts) that the retinal representations of a number of successive attitudes—the consecutive phases of a horse leaping a gate, say—should generate the mental notion of a motion, inasmuch as there can be no possible relation primarily between any two such mechanical representations. Contrariwise, however, as the hand perceives an object in two positions by movement of the arm through a certain angle, so the secondary perception of the horse in one position is amalgamated with a similar perception of the horse in another position. It is the linking of these like perceptions that is essential to the idea of a perceived motion.

3. Objects are perceived to gyrate round the individuality after rapid rotation of the body, notwithstanding their retinal images are fixed. The general rotatory muscles, in this case, cause the centre of perception to spin round in one direction, whilst (by sympathetic secondary abeyance) the straight muscles of the eyeball give rise to objective gyration in the opposite direction; when walking rapidly along a road, in like manner, the adjacent hedge-rows seem to move oppositely. Here is evidence that the secondary perceptions of vision are persistent after absolute cessation of the antecedent bodily movements, and we have already employed this principle of persistence in the formation of visual angles.

4. Let a traveller by train fix his optical axes on an object some 300 yards distant, he will observe that the near hedges move rapidly in one direction, whilst the more distant trees move slowly in an opposite direction; this effect may be likened to the arms of a balance swaying horizontally about the binocular centre. It is true that the nearer objects are depicted on the upper and those more remote on the lower retinæ, but the main incident resides in the images of both sets of objects floating over the fundus in the same course; how, it may be asked, are such contradictory results to be reconciled excepting by some process of secondary perception? Whilst confessing that the paradox awaits a definite solution, I cannot omit to note its striking analogy to the twofold forms of monocular relievo, wherein a superficial extension is seen to face towards the right under one form and towards the left under the other form (conversion of phase).

Resuming our data, when the points of a pair of compasses are applied to the skin of a blindfold person, they require to be separated by a certain interval—the diameter of a sensory circle (Ernst Weber)—before they can be identified as being duplicate. Apparent number, consequently, has been viewed as resulting from the intervention of one or more sensory circles or retinal cones; but our proposition makes it to consist in the appreciation of two or more distinct directions, and the phenomena of single and double vision or

touch (already cited) are a sufficient illustration. Number, indeed, is related to two classes of perceptions entirely distinct; it is a secondary perception in connexion with extension and form, and primary in its relation to time—so many sounds striking the tympanum per minute. This distinction between the mental ideas of number is important, furnishing a satisfying clue to the paradoxical impossibility of squaring a circle; thus, a ring of thread is readily convertible into the square formation (secondary), whilst the feat is impracticable by mathematics (primary); a straight line, again, is unity in a secondary aspect, but it may be abstracted into any number of primary measures (and the same for a superficies). Take another example of number: a printed word appears *per se* to be a unite (secondary), although its several letters may be counted; the mental idea of number, in this instance, is *primâ facie* so many distinct volitional impacts, but it is really a question of time together with a succession of primary perceptions.

Sensory circles vary in size in different parts of the body. The adjoining table gives their apparent diameters according to different authorities:—

	Weber.	Le Conte.	Bernstein.
Tip of tongue ...	½ a line	$\frac{1}{20}$ in.	·039 in.
„ fingers ...	1 to 2 lines	$\frac{1}{12}$ to $\frac{1}{24}$ in.	·079 in.
Palm of hand ...	5 lines	¼ in.	—
Back „ ...	14 „	½ to ¾ in.	·157 to ·196 in.
Arm	30 „	½ to ¾ in.	—
Back	30 „	3 in.	1·97 to 2·36 in.

Fineness of tact conjoined with correspondent mobility in various parts has long been recognised, as in the elephant's trunk, the beaver's tail, &c.; such a constant ratio between sensory and muscular acuity (well shown by the table) has been viewed in the light of a mere coincidence; but it is offered as verifying a motor causation. The dimensions of sensory circles have been attributed to textural fineness of nervous organisation; thus, if we suppose one hundred tactile papillæ to exist in a circle of the back (3 in. diameter), there will be a like number in a circle of the palm of the hand (½ in. diameter), whereby the hand's sensibility is so many times greater than that of the back. But, by the proposition, the cutaneous nerve-expansion may be universally equisensitive in so far as the present phenomena are concerned; and what are the practical facts concerning increments of sensibility? I consider that sensibility is best measured directly by passing the forefinger lightly over different surfaces of the skin. If we adopt this method, a tolerable equality of sensation will be felt between the palmar aspect of the forearm and hand; these surfaces appear to be more sensitive than that of the forefinger, whilst the back and flanks are highly sensitive. Then, touching another point, it has been assumed that one hundred cutaneous corpuscles in a sensory circle really signifies a corresponding number of fibrillary terminations in the brain; how is the single impression disposed of? Mental essence, according to the *adhuc* highly mechanical but rather speculative neurologists, now steps in with its stately faculty to charm away every dilemma; the mind, it is said, whilst it can readily identify each fibrillary stimulation, is limited in its differentiation of an aggregation of impressions unless more than a certain number (a hundred say) of fibrillary insertions are excited. I am not aware that it has been decided whether or not the fibrillary insertions are more compressed in some cerebral areas than others; but here, in the absence of an explanatory *modus*, I contend that the foregoing hypothesis is foundered. Truly says Locke, "In bare naked perception the mind is passive, and what it perceives it cannot avoid perceiving." In truth, physiology points everywhere to conscious mind as being an impressional resultant rather than an impressional generator or modifier.

Proceeding next to examine a few data which seem to be intelligible only on the terms of the proposition, the first remark is that the minimal visual angle of 44″ is an invariable value in every part, lateral or direct, of the retina. On the terms of Le Conte, however, (1) that the size of the cones determines the minimum visibile, and (2) that the cones of the macula lutea are far smaller and more numerous than elsewhere, it will result that minimal angles are more acute in the axis, rather than that a hyperæsthesia ensues. Sensory circles are of variable, and visual angles of uniform, value; in the latter case, because ocular rotations affect equally the entire retinal expansion.

The following facts, lastly, refer especially to the tactile faculty, and possess a marked significance:—(*a*) Sensory circles differ in size in different individuals, well shown in the above table. Does a more close disposition of nervelets in some persons offer a satisfactory reason for the difference? (*b*) They differ in size in the same person at different times. Has the mind an influence to contract or dilate cerebral impressional areæ, and irrespectively of volition? (*c*) They are developed by assiduous exercise—e.g., the blind man reading with his fingers, or the armless woman sewing with her toes; the sensibility in these cases is increased in an equal ratio with the mobility. Is this a mere coincidence? Let us draw a simple parallelism in reply to these queries. Thus: Some persons play billiards better than others; they are in a better cue for play at some times than others; they profit by practice. Well, then, has primary sensation any causative bearing on either parallel?

Addendum.—At the close of a protracted investigation concerning the nature and various phases of the secondary perceptions, comprising several memoirs which have been honoured by insertion in these columns, I may be permitted to add a few general remarks. My hypotheses on erect and single vision, visual reliefs, &c., have been present to my mind in a more or less imperfect shape for upwards of a score of years. These several subjects tend to elucidate, and have been elucidated by, what a strict inductive system seems to justify me in styling a theory of secondary or acquired perception. The main feature of the theory consists in a brainward transmission of the *vis insita* of voluntary muscular tension, to enter into a combination therein with relational centripetal currents of primary perception for the evolution of appropriate forms of secondary perception—that is, for the mental declaration of the primary qualities existing in natural bodies. I am happy to say that the theory does not seem to be invalidated by, but rather harmonises with, the experimental researches of Professor Ferrier on the motor areas of the cortex. Professor Wyld states for instance, in reference to the faradisation of the anterior lobes giving rise to contractions of the head and limbs of animals, that he is not disposed to surrender his admiration of the forehead as the seat of intelligence; I cannot subscribe to his position, however, seeing that by far the major part of intellectualism is a motor process. The following remarks of Dr. James Davey bear directly on the context, and I cordially endorse them. He writes: "The application of stimuli to portions of the cerebral surface beget, as a matter of necessity, certain and defined muscular movements; but such are no kind of proof that a centre or source of mere motive power has been reached or excited to action. The movements observed are, to all intents and purposes, due to another cause, and that a psychical or mental one."[1] Then he points out that this must be so, since the stimuli may produce like motor results indirectly through the instrumentality of one or more of the external senses—the sense of sight, or touch, or sound, and so on.

One or two words more. The muscle sense of Sir Charles Bell has especial reference to a recognition of the position of the limbs and other movable parts of the body, together with sensations of solidity or impenetrability (not solid form), the weight and other resisting properties of essences; hence it is a line of research having only a remote connexion with the various doctrines enunciated in these columns. It might repay investigation to trace the reason that a Chinese or Japanese painting exhibits such vivid colouration, whilst their crude notions of perspective clearly evince a defective or modified secondary perception; their statuettes, too, are such grotesque contortions. Is it dependent on their sedentary habits co-operating with a perfunctory exercise of secondary attention, or are their muscular dispositions irregular? Not the least claim of the above theory is that it establishes a sound substantive basis for positive or realistic metaphysics; its obvious tendency is to deal a heavy blow to every ideational and intuitional form of philosophy as touching initial conscious states.

[1] Journal of Psychological Medicine, vol. ii., p. 253.

THE SANITARY ASSURANCE ASSOCIATION. — The sixth annual meeting of the members of this Association was held on the 14th inst., Sir Joseph Fayrer in the chair. Mr. Joseph Hadley, secretary, read the annual report, from which it appeared that the business of the Association during 1886 had been much greater than in any previous year, the income having been £804, as against £462 in 1885.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

SUBMAXILLARY CALCULUS.

BY COLLIS BARBY, L.K.Q.C.P.I., M.R.C.S.

THE following case is worthy of record on account of the unusual size of the calculus and the gravity of the symptoms resulting from its presence.

R. W——, aged sixty-six, consulted me early in September last concerning a swelling beneath the lower jaw on the right side, which caused him extreme difficulty in swallowing. Flashing pains came on at intervals, and extended radially from the swelling upwards into the face and head, inwards towards the tongue, and downwards as far as the right shoulder and arm. These symptoms had existed for about eight months, becoming gradually more severe; latterly the patient had begun to lose flesh, and his friends became alarmed at his condition.

Upon examination I found a hard substance corresponding in position with the submaxillary gland placed just below the ramus of the inferior maxilla, rounded in form, and more easily distinguishable from the outer side than from the interior of the mouth, and about the size of a small walnut. By pressure from the outside a few drops of purulent discharge appeared at the orifice of Wharton's duct. There was no hardness or concretion at the mouth of the duct, as usually met with in cases of salivary calculus, and there was no induration of the cervical glands. Taking into consideration the gravity of the symptoms and the increasing loss of strength, I suggested early removal, but requested a consultation. Dr. Ainsley of Hartlepool saw the case with me and confirmed my suggestion. On Oct. 12th, chloroform being administered by Dr. Ainsley, I proceeded to cut down upon the submaxillary gland by a vertical incision about a quarter of an inch anterior to the facial artery as it crosses the inferior maxilla, extending downwards about two inches; a second cross incision was made to make room. There was considerable hæmorrhage from the submaxillary and other small branches of the facial. The whole of the gland superficial to the mylo-hyoid was removed, and the calculus could then be distinctly felt at the commencement of the duct, and apparently embedded in the gland. A few of the posterior fibres of the mylo-hyoid were divided, and the calculus seized with vulsellum forceps and removed. Upon examination after removal, the calculus proved to be phosphatic, and measured one inch by half an inch approximately (the exact measurement in length being uncertain, owing to the crumbling of a portion of the calculus beneath the vulsellum forceps). The wound was plugged with lint soaked in turpentine, eucalyptus ointment and iodoform being substituted upon the following day. The subsequent history of the case was one of uninterrupted recovery, the wound granulating freely and becoming entirely healed in three weeks from the date of operation, all the symptoms previously complained of having entirely disappeared.

Remarks.—The ordinary method of removal by incision of the mucous membrane was impracticable in this case owing to the depth of the calculus from the surface of the mucous membrane. Erichsen mentions, as the largest calculus removed, one of the size of a small damson-stone; but, so far as I can ascertain, no mention has been made of a calculus of this size occupying so deep a position.

Castle Eden, Durham.

ERUPTIVE ECCENTRICITIES.

BY J. G. MARSHALL, M.B. CANTAB.

MRS. Q——, aged forty-eight, married, living alone, had been a sufferer from chronic rheumatism for several years. She had an attack of facial erysipelas some time back, but could not fix the date. She was subject to occasional severe attacks of neuralgia, for which I could find no visible cause. About two months ago she presented the symptoms of erythema nodosum, and went through the illness in a severe and typical form, the patches being very large and painful, leaving the shins, back of forearms, and inside of thighs covered with livid marks, as if she had undergone a beating. At the end of a fortnight this eruption seemed to have run its course; but the patient still seemed very unwell, and complained of stiffness about the neck and jaws, with continual pain in the head. She maintained that she had been suffering from erysipelas, though she acknowledged that she had not been like it before. Two days after the last crop of erythematous lumps had disappeared she was seized with erysipelas of the head and face, and had it very severely, with high fever and extensive swelling of the face and neck.

She was for two or three days in a very critical condition, the features being almost obliterated, and the infiltration of the tissues of the neck deep and extensive. One morning when she was getting better she complained of intense itching of the back of the forearms and hands, which on examination presented the unmistakable white "wheals" of urticaria. There was little or no redness of the skin; the eruption was confined to the extensor surface, did not reach above the elbow, and died away in forty-eight hours. There had not been a trace of erysipelatous rash on the body during the attack of that disorder. A short time ago I congratulated her on getting on so well, when she said that she had another attack of erysipelas at the bend of the elbow. On examination of each elbow-joint, on the flexor side, and nowhere else, I found a patch of typical eczema, the vesicles being perfectly unmistakable, with watery exudation and shiny redness. She had been scratching with her nails, which she had not done before. Fresh patches of eruption appeared at the wrist. Both yielded readily to treatment, and now nothing is left but a little branny desquamation.

The case is such a remarkable one that I think it deserves publication. I have not the smallest doubt as to the several characters of the eruptions, which I observed most carefully. Unfortunately I am at a disadvantage in being at a distance from any of my own profession, or I should have exhibited the case. I am quite prepared to see this lady shortly with a fine development of herpes zoster, or exhibiting patches of psoriasis to complete the series. She is of a highly nervous temperament, and occasionally subject to fits of great excitability.

St. Margaret's Bay, Dover.

THE TREATMENT OF MALARIAL DISEASES BY PICRATE OF AMMONIA.

BY H. MARTYN CLARK, M.B., C.M. EDIN.,
IN CHARGE OF THE AMRITSAR MEDICAL MISSION.

PICRATE OF AMMONIA possesses valuable therapeutical properties, though it does not seem to have received the attention which it deserves. The characters, properties, and uses of this substance were carefully investigated by Dr. Dujardin-Beaumetz, and the results were communicated by him to the Therapeutical Society of Paris in 1872.[1] The salt had previously been successfully used in the treatment of intermittent fever by Drs. Braconnot, Calvert, Aspland, Bell, and others. Dr. Beaumetz's investigations confirmed the results at which these observers had arrived, and showed that in this substance we have a valuable, and efficient substitute for quinine in the treatment of malarial diseases. It appears to have passed out of mind, and, as far as I can gather, has never been used in India. My attention was directed to it accidentally in the following way. I had a patient under my care at a hill sanatorium who had suffered for seven months from severe intermittent fever of the quotidian type. Quinine, arsenic, and other antiperiodics had been, and were, freely used, but failed to give relief. After ten days' treatment the fever still recurred daily with its accustomed severity. At this juncture the local chemist told me of a remedy for fever, which he had received some years previously, but had never tried. This I found to be picrate of ammonia. I gave it to my patient, with very gratifying results. The fever did not recur next day, nor did it do so at any time during the three subsequent months in which she remained under my observation. I have since then constantly used the picrate of ammonia in the treatment of malarial diseases. There has been ample opportunity to test it fully, for Amritsar is notorious in the Punjab for its unhealthiness, and diseases of this kind are severe and frequent. During a period of four years and a half, I have treated over

[1] THE LANCET, Oct. 12th, 1872.

10,000 cases of these diseases with this agent, with the happiest results. So uniformly successful has it been that I have in our very extensive practice here, given up the use of quinine and the cinchona alkaloids for the treatment of intermittent fever, and have substituted picrate of ammonia for them. A record was kept of 5000 cases of intermittent fever treated with this agent. Of this number, in nine cases only did it fail to cure, and in these quinine succeeded at once. I usually give it in doses of from one-eighth of a grain to a grain and a half four or five times a day in pill. Half a grain is a fair average dose. Thus given the result is soon visible. In the great majority of the cases treated, half-grain doses in the interval prevented the recurrence of the next attack of the fever, while in about 20 per cent. of the patients two or three attacks followed before the fever ceased. In one case of quartan ague, despite large doses of the salt, the fever recurred for six periods, gradually diminishing in intensity, and then yielded to it. It is equally successful in all the forms of ague, but it is a curious fact that the cases in which it failed to cure were all of the tertian variety. I have also employed this agent in the treatment of twenty-five cases of malarial neuralgia of various nerves, six cases of malarial headache, and one of malarial colic. In all these instances it cured completely and speedily. In remittent fever it does not appear to be of use; six cases of a severe type were treated with it without any effect. Neither is the enlarged spleen of ague benefited by it. I have given it in numbers of such cases in conjunction with ergotine with good results, but such results are secured equally by the use of the ergotine alone.

My experience leads me to the conclusion that in all varieties of intermittent fever, and in malarial neuralgias, picrate of ammonia is a valuable antiperiodic, and it is an efficient and perfect substitute for quinia. It has the following advantages over quinine:—1. It is much less expensive. This is an important consideration where, as in Indian practice, hundreds of cases of malarial diseases have to be treated annually. 2. The dose given is very much smaller. 3. It does not produce the unpleasant effects that quinine does—headache, deafness, tinnitus, &c.; nor does it disorder the digestion or cause nausea, as quinine is apt to do, in the doses in which it has to be given in India.

Amritsar, Punjab, Northern India.

CASE OF TRAUMATIC TETANUS; RECOVERY.

By JOHN WELPTON, L.R.C.P.L., M.R.C.S.

IN THE LANCET for 1886 two cases of recovery from tetanus (traumatic) are referred to. I had myself a short time ago a successful case.

On Sunday evening, Nov. 7th, I was called to B. B——, a tall powerful man about the age of thirty, and found him suffering from pronounced tetanus, with eyes fixed and staring, hands clasped behind the neck and quite rigid, and opisthotonus so strong that four people could with difficulty keep him down when the spasms were violent, those of the diaphragm being agonising. I placed him under the influence of chloroform, and administered within a short time two drachms of bromide of potassium, together with one drachm of chloral hydrate. I remained with him nearly three hours, when he became quieter and had no more spasms. He was quite well in two or three days. His friends did not know of any wound, but the man explained that in cutting a corn under the right great toe he had cut painfully into the quick three or four days ago. He was a night watchman at that time and much exposed to the weather.

Ravensthorpe, Yorks.

CASE OF MELANOTIC SARCOMA.

By J. N. BREDIN, L.K.Q.C.P.I., &c.

THE patient, a lady, aged fifty-four, first noticed a little spot on the right heel about the last week in October, 1886, thinking it was merely a chilblain or occasioned by a tight boot; it gradually, however, became troublesome, though entirely free from pain, and she then consulted my predecessor Mr. Holt, who advised a consultation. Accordingly, Mr. Rivington was called in, and advised an operation which was performed on Nov. 29th, and seemed effectually to remove the mass. I saw the patient on Dec. 2nd. The growth had none of the characters whatever of melanosis—in fact, up to this time nothing showed itself from October to lead one to be certain. Meanwhile, Mr. Holt and Mr. Rivington suspected melanotic sarcoma. About eight days after the operation several spots of unmistakable melanosis appeared, first on the outside and subsequently on the inside of the thigh, and afterwards on the heel, and was now covering the cicatrix of the wound, which healed without intermission. All these places on the thigh and heel are now becoming confluent and extending and growing rapidly on the skin, without pain. One spot identical in character appeared on the head, and a single one on the back. Neither of these has increased in size, nor have any fresh ones appeared. This is, I presume, a most interesting and remarkable case, and may be seen by any medical man who may appoint an hour with me, as the patient is most willing to be seen by anyone.

Norton Folgate, E.C.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

SEVEN CONSECUTIVE CASES OF CHARBON TREATED SUCCESSFULLY BY EXCISION.

(Under the care of Mr. BRYANT.)

WE are able to publish a series of cases of malignant pustule which have occurred in the wards of Guy's Hospital during the course of the last few months, all of them under the care of one surgeon, and successfully treated in a similar manner, by excision, followed in some instances by the application of caustic. This disease is one of which during the last few years several examples have presented themselves in London, chiefly at Guy's and the London Hospitals, and much has been done by the surgeons of these institutions to advance our knowledge of it. The cases, two of which we give this week, will be read with interest, and the difference in the local and constitutional symptoms carefully noted.

CASE 1.—*Charbon of right temporal region, with lymphatic enlargement; excision; skin-grafting; cure.* (From notes by Messrs. Du Boulay and F. P. Sarjant.)—Chas. A——, aged twenty-nine, a labourer at a hide warehouse, was admitted on Jan. 21st, 1885. The patient's father died of aneurysm of the heart; his mother is living and well. He has been a hard worker, and steady in his habits. Had measles when a baby, and rheumatic fever when he was a boy (this lasted six weeks). About four years ago he was ruptured, and ever since has been wearing a truss. He has of late had some palpitation and nervousness. The patient, who works at a hide factory, was sent to the hospital by the manager (who, he thinks, had the disease himself some years ago). About Christmas last he came as an out-patient with a swelling like a boil on his left cheek. This was opened, and he got well. He was in his usual health up to Monday, the 19th ult., and was at his ordinary occupation, which consisted in handling hides of all kinds, which had come from all parts of the world; they were cow, ox, buffalo hides, and rabbit and opossum skins. While he was at work he felt an itching on his left temple, and putting up his hand felt a small pimple about the size of the head of a pin. He felt dull, depressed, and cold that day. On the Tuesday he still felt poorly, the pimple had increased to about the size of a pea, and the surface was black. On the Wednesday it was blacker and larger. During the whole time he had felt cold and unwell, but had kept at work until he was admitted into hospital.

Condition on admission.—The patient is a well-built, healthy-looking young man. When placed in bed he shivered and complained of bad headache. Temperature

99·8°; respiration 20; pulse 88. The pustule was situated on the left temple, about an inch behind the outside of the eyebrow and above the zygoma. The central slough measured one-eighth of an inch in diameter, and was circular. It was surrounded by a rim of vesicles whose long diameter—namely, in the horizontal direction—was three-eighths of an inch; in their short diameter—the vertical—a quarter of an inch. The vesicles were more marked above, and at the back there was redness of the skin for about two inches and a half from above downwards, which faded away gradually; the pustule was not raised above the skin more than one-sixth of an inch. The glands at the angles of the jaw were enlarged on both sides, particularly on the left. His teeth were bad. There was a swelling on the left side of the face just below the angle of the mouth. There was also a pimple on the left side of the back of the neck, about the size of a pea, red like a boil, without perceptible black centre. The patient was unable to open his mouth very widely.

At about 7 P.M. on the day of the man's admission, Mr. Du Boulay, by Mr. Bryant's instructions, removed the pustule. Chloroform was administered in the ward. A skin incision, elliptical in shape, was made behind the eyebrow to about half an inch in front of the ear, extending in depth to the deep fascia over the zygoma. The skin and tissues beneath, between the incisions, having been dissected away, the raw surface was thoroughly cauterised all over with Paquelin's thermo-cautery; the wound was then dressed with terebene oil and a pad of lint bandaged over it. The patient took chloroform very well, and was not sick after it. He was ordered five grains of sulphate of quinine every four hours, four ounces of brandy, and full diet.

Jan. 22nd.—The patient was restless during the night, as he said, from headache and the effects of chloroform. Temperature 97·2°. He seemed fairly comfortable. His bowels were open twice yesterday before his admission. Urine limpid, clear, and of a light straw colour, much lighter than normal. Sp. gr. 1017; slightly alkaline reaction; no albumen, mucus, blood, or pus; on boiling there was a slight whitish precipitate, which disappeared on the addition of nitric acid. At 2 P.M. the patient was much the same; his face was red and puffy, and he had headache, and a singing or buzzing noise in his head. Wound painful. Evening temperature 98·8°. Wound dressed. No bacilli could be detected in the urine.

23rd.—The patient passed a good night and feels comfortable. He is better than yesterday. The pimple on the back of the neck is not a charbon. There has been no rise of temperature.

24th.—The patient feels only a little soreness about the wound; slight headache. His bowels have not been open since his admission. Urine of normal colour; sp. gr. 1024; no albumen, but some phosphates; slight acid reaction; no bacilli could be detected, although the examination was carefully made.

25th.—The patient passed a fair night. Complains of increased soreness in the wound and shooting pains across the back. In the evening he seemed worse. Temperature 102·5°. The quinine was omitted, and ten grains of calomel and colocynth given at night; also twenty grains of salicylate of soda in orange flower water every three hours.

26th.—Passed a restless night; has great pain in the head and across the back and chest; temperature 99·2°; bowels open. Pulse 84; respiration 20. Urine: sp. gr. 1025; normal colour; no albumen; could find no bacilli.

27th.—Bowels open this morning. Not much alteration in patient's condition.

28th.—Passed a good night. Great soreness in the wound. Patient says he feels better. Pulse 72. Wound dressed in the evening.

30th.—Patient doing fairly well; bowels open daily. The wound itches and smarts very much.

31st.—The salicylate of soda ordered three times a day. Patient much the same; takes his food well. Urine straw-coloured; acid; no albumen; sp. gr. 1021; reaction of salicine.

Feb. 9th.—Has been getting up daily since the 4th, and is making good progress; there is still a quantity of discharge from the wound. Patient feels fairly well in himself. Ordered fifteen minims of tincture of perchloride of iron three times a day, with glycerine and chloroform water.

10th.—Five pieces of skin were grafted.

12th.—Three of the above have taken; the skin looks healthy, and less flabby than it was some days ago.

15th.—Three more pieces of skin were grafted to-day and the wound dressed; the skin is beginning to spread over the upper edge of the wound. Ordered a mixture, with cinchona as a tonic.

24th.—Patient progresses but slowly. The sore is not much smaller than it was on the 15th; it looks rather pale and flabby.

March 14th.—The patient was discharged to-day; wound not quite healed.

CASE 2. *Charbon of face, with enlargement of lymphatic glands; excision and cautery; recovery.* (From notes by Messrs. Beard and D. T. Jones.)—J. N——, aged thirty, living at Walthamstow, was admitted on Sept. 5th. On the previous Wednesday a small lump appeared on the left cheek; it gradually increased in size. On the Friday following she called in a medical man, who told her she was suffering from blood poisoning. She had had nothing to do with cattle, and she had a baby vaccinated recently.

Condition on admission.—The pustule is half an inch in diameter, with a black depressed centre, surrounded by a ring of vesicles containing red serum. There is a brawny hardness in the surface around for the radius of one inch; there is great swelling in the submaxillary region, where the glands are enlarged and tender.

Sept. 5th.—Urine nearly colourless; no mucus; acid; sp. gr. 1005; no sugar, blood, or albumen.

6th.—Mr. Clement Lucas examined the patient, and recommended excision, which was performed this morning by Mr. Beard. Two incisions were made, one on each side of the pustule from a point about a quarter of an inch above the side of the nose down to a point at the lower margin of the inferior maxilla about an inch and a half from the median line; then, holding the skin at the upper end with a tenaculum forceps, the skin within the margins of the incisions and a quantity of muscular substance were cut away. Two vessels were twisted. The deepest incision was near the angle of the mouth, extending at this point nearly to the mucous membrane. The wound was oval in shape, three inches long by an inch and a half broad; it was cauterised by Paquelin's thermo-cautery, and left open.

7th.—The wound appears fairly healthy; the swelling in the submaxillary region has decreased in size. Patient has been ordered a mixture containing iodide of potassium. Urine of a bright yellow transparent colour, containing a small quantity of flaky mucus; reaction decidedly acid; sp. gr. 1033; no albumen or blood; five grains of sugar to the ounce.

9th.—It should have been remarked that lymph was running from the arm before the lump appeared. Patient's baby is eight months old, and is still suckling. Fresh serum was examined for anthrax bacilli, but none were found. One of the patient's breasts was beginning to get tender, and a lotion of belladonna and glycerine was applied. The urine is of a dirty yellow opaque colour, containing a large quantity of mucus, which is of a buff colour; sp. gr. 1031; acid; sugar still present.

13th.—The wound was dressed this morning. When the dressings were taken off one of the vessels began to bleed; this was at once twisted by the dresser. She is allowed to get up an hour every evening after tea.

16th.—Ordered a ten-grain aperient pill at night; middle diet.

22nd.—Patient is taking perchloride of iron and cinchona mixture. She left this afternoon. Wound smaller, and looking healthy.

NORTH-EASTERN HOSPITAL FOR CHILDREN.

A CASE OF ACUTE MENINGITIS IN WHICH COMPLETE RECOVERY TOOK PLACE.

(Under the care of Dr. C. E. ARMAND SEMPLE.)

FOR the following account we are indebted to Mr. C. D. Green, late house-surgeon.

William C——, aged seven years, was admitted, under Dr. Semple, on May 13th, 1886. The child was said to have been quite well until May 10th (three days before admission), when, on returning from school, he vomited and complained of headache. The following day he was drowsy, and at night became delirious. The next day (May 12th) he was brought to the out-patient department; he was then somewhat drowsy and moved with difficulty; pulse 108°; temperature 101°; tongue coated and rather brown. Whilst

waiting he appeared to become unconscious for a few minutes once or twice. As there seemed some probability of the patient being in the early stage of an acute specific fever, he was not admitted. The next day (May 13th) the mother came to say he was much worse, and, she thought, dying. He was visited, and found to be in a condition of active delirium, throwing his arms about wildly, and screaming loudly "Mother, mother," although his mother was standing close to his bedside at the time. The skin was hot and dry; there was no eruption save that produced by insects, and no inflammation of throat. His removal to the hospital was directed. Both parents living and healthy; no history of phthisis in their relatives. There were three other children, two of whom are living and healthy; the third was taken ill some two weeks before the patient, and died during his (patient's) illness. The symptoms were pain in the head, vomiting, and rapid wasting. Optic neuritis was observed; the diagnosis was tubercular meningitis, but we were, unfortunately, unable to obtain a necropsy.

State on admission.—A fairly well nourished child, complaining of headache. He was in a semi-conscious condition, but could be roused when spoken to loudly. The muscles at the back of the neck were contracted and rigid; the head was retracted, and could only with difficulty be moved. Abdomen somewhat retracted; *tache cérébrale* well marked. Pupils equal and acting to light; no oculo-motor paralysis; no nystagmus. No paralysis of limbs, and no evident loss of sensation. No abnormal physical signs in chest or abdomen. Tongue covered with a brown fur and rather dry. Temperature 101°; pulse 112, regular. Urine clear; acid; no albumen. The right optic disc appeared a little blurred.

During the night the patient was wandering and noisy, frequently screaming loudly. The following day (May 14th) he complained much of headache. There had been no vomiting since admission; he answered questions and obeyed directions. The urine and fæces were passed into the bed. During the next few days the more acute symptoms subsided somewhat; the patient became conscious, and, though he still complained of headache, slept fairly well at night. (He had been kept in a dark room.) The temperature chart showed evening exacerbations, with morning remissions, but rising slightly higher on successive nights (maximum 103°). On the morning of May 20th the temperature fell to 99°, and remained below that until the evening of May 21st, when it rose suddenly to 103°. The patient was rather drowsy, and still complained of headache. He lost flesh rapidly; his weight, which on admission was 38 lb., on May 22nd had fallen to 34 lb.

During the next month the symptoms were drowsiness and indifference to what took place around him, disinclination to take food, and progressive emaciation; there were frequent complaints of headache, and occasional screams and cries of "mother," once or twice repeated; seemed only semi-conscious, and would not answer questions. Superficial reflexes exaggerated; knee reflex and ankle-clonus not obtained. Pulse variable in frequency, and at times irregular. Bowels confined. With the exception of a slight convergent squint, which was noticed the day after admission and only lasted a few days, no local paralyses were observed. Temperature below 100° from May 27th to June 15th. On June 16th the weight was 29½ lb., the patient having thus lost 8½ lb. in thirty-four days. On the morning of June 22nd the patient, for the first time since admission, had a fit, in which there was general rigidity with complete unconsciousness; he had vomited twice during the morning. On the 25th he had three similar fits, the fits lasting each about fifteen minutes. No fits occurred after this date. He was at this time very feeble and extremely emaciated; was usually in a drowsy, apathetic condition, but was occasionally noisy, constantly repeating the cry "mother." He could, however, be roused to some extent when sharply spoken to. There were occasional evening rises of temperature from June 14th to July 11th, after which the temperature remained below 100° until August 9th. The patient remained in a similar condition for about a fortnight; he was markedly emaciated, and so feeble that his death was daily expected. The malar and jaw bones were extremely prominent, and the outlines of the limb bones plainly visible. No bedsores had formed at any time (he had been kept on a water-bed). There was a purulent discharge from the right ear, which was noticed for the first time a few days after admission, and no history of its presence previous to the onset of the illness could be obtained.

July 17th.—His weight was again 29½ lb. He had not been weighed for a month, appearing too ill to be moved, but had evidently still further lost flesh during the first part of the interval. Began to take his food better.

20th.—Would answer questions, but not intelligently; vomited twice on the 21st.

27th.—No complaint of headache; no vomiting.

29th.—Vomited three times; answers questions intelligently; takes food well; does not complain of pain.

Aug. 5th.—Now considerably improved; plays with toys, and takes much more notice of his surroundings; does not complain of headache; still vomits occasionally; bowels regular; gaining flesh.

On the evening of Aug. 8th the temperature rose to 101°, and the patient again complained of headache; the discharge from the right ear, which had persisted to a slight extent since it was first noticed, increased somewhat (the ear had been syringed out twice daily with boracic acid lotion, and iodoform powder had been blown in, but no other local treatment had been adopted. On the following day the temperature fell to 99·2°, and the patient ceased to complain of headache. From this date convalescence was uninterrupted, and the patient left the hospital on Sept. 23rd. His weight was then 42½ lb.; there was no mental deficiency, and the general health was good. He was seen again at the end of a month, and appeared to have no ailment; the discharge from the ear had quite ceased; the membrana tympani was not destroyed, nor was the hearing very much impaired in that ear. There was no defect of vision.

Remarks by Dr. SEMPLE.—Cases of recovery from a severe attack of meningitis, however caused, are, I think, sufficiently uncommon to make the above case worthy of record. When the patient was first admitted, the diagnosis made was tubercular meningitis (the more so as the brother was at that time under observation, who, as mentioned in the history, died of what was believed to be tubercular meningitis), and the extreme and rapid wasting which took place was certainly in favour of tubercle; the appearance of the diarrhœa, however, suggested another explanation of the case, and the slight relapse which took place associated with an increase in the discharge from the ear, and also the fact that the patient recovered, were more compatible with its being a meningitis caused by extension from the tympanum rather than due to tubercle; it must be borne in mind, however, that there was never any swelling or tenderness over the mastoid process, that the otorrhœa completely ceased without any treatment beyond syringing out the ear and dusting in iodoform powder, and that the discharge never became offensive; moreover, it appeared after the commencement of the patient's illness, so that, although tubercular meningitis could not with certainty be diagnosed, there were some points in favour of that explanation. In THE LANCET of Jan. 8th, 1887, there is an account of a case brought by Dr. Carrington before the Pathological Society in which recovery from tubercular meningitis was inferred from post-mortem evidence. In Jaccoud's "Dictionnaire de Médecine et de Chirurgie," article Méninges, are quoted two remarkable cases of complete apparent recovery after tubercular meningitis, in which a second attack of meningitis occurred after a long interval—in one case five years, and in the other one year—after the first attack; in both cases the diagnosis was confirmed by a necropsy, but, unlike Dr. Carrington's case, the exact appearances are not described, the reference to the post-mortem examinations being as follows:—In the first case, ... "Les méninges offraient des lésions évidemment graves et fort anciennes que remontaient certainement à la première attaque"; and in the second case ..... "et mourut ..... d'une tuberculose méningée avec un fort épanchement hydrocéphalique fait dont nous pûmes nous convaincre à l'autopsie." In the same article is quoted another case more exactly bearing on Dr. Carrington's case, in which a girl aged thirteen was observed to recover from an attack of meningitis "caractérisée par les symptômes les plus classiques et survenue graduellement," and who died some years afterwards of pulmonary phthisis; no reference, however, is given to any post-mortem evidence, and the writer of the article remarks that the inference that the meningitis was of tubercular origin did not appear to him to be legitimate. I have thought the case worth quoting, however, on account of its resemblance to that brought forward by Dr. Carrington.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Discussion on Nephro-lithotomy.

AN ordinary meeting of this Society was held on the 11th inst., Dr. W. H. Broadbent, F.R.C.P., President, in the chair. The whole of the evening was occupied with an interesting discussion on Nephro-lithotomy, of which the following is a full report.

Dr. GEORGE JOHNSON said nothing could be more satisfactory than the case read at the last meeting by Mr. H. Morris. The patient had suffered for nineteen years, had had to take enormous quantities of alcohol and morphia, and yet was relieved in a short time by a simple and safe surgical procedure. He had altogether given over to surgery five cases of renal calculus, and with complete success in all the cases. Three were operated on by Mr. Knowsley Thornton, one by Mr. T. Smith, and one by Mr. Morris. One of the cases was thought by a medical man to be chronic Bright's disease, but for this opinion there was not the slightest ground; yet even after the removal of a calculus the medical practitioner remained incredulous, and hinted that the stone shown him by the patient was of fraudulent origin. The case of a little girl, eleven years of age, who suffered from pyuria and hæmaturia with renal colic in the left side was narrated. Mr. Thornton operated by the combined abdominal and lumbar method, and, strange to say, removed five stones, not from the left, but from the right kidney. Had the lumbar operation been performed this case would have been set down as a failure of renal surgery. Dr. Johnson remarked that now the physician could have recourse to other measures than lithotripsy, passage of stones *per vias naturales*, and encystment before or after suppuration, with destruction of kidney, and, looking to the serious effects and dubious prospects of success of such methods, he thought the profession and the public were to be congratulated on the new aid that was afforded by surgical interference.

Mr. KNOWSLEY THORNTON gave the history of his own practice in renal nephro-lithotomy. In 1879 or 1880 he made his first attempt at lumbar nephro-lithotomy. After making the lumbar incision a large tubercular kidney was discovered. This was drained in the loin; some relief of symptoms was obtained by the patient for a time, but suppression of urine supervened, and the patient died. The necropsy showed that both kidneys were diseased. This operation suggested the necessity for a thoroughly exact diagnosis. In future Mr. Thornton resolved to secure greater accuracy of diagnosis by an exploratory abdominal section, and if a stone were found, to make a separate clean incision in the loin for its extraction. By employing Langenbeck's incision for abdominal section, he thought it would be possible to explore the kidneys and the ureters, and thus make certain of the state of both organs as well as of the position of the stone, should one be present. It was not until the year 1883 that Mr. Thornton had the opportunity of putting these principles into practice. In December, 1883, the combined method was successfully employed upon a woman aged twenty-three, with right renal calculus. She was in a bad state of health. Her father had died of renal calculus. The combined method was practised; the abdominal incision allowed of the examination of the other kidney. The left hand was used to fix the stone in the pelvis of the kidney, whilst the right hand made a clean incision in the loin straight down on to the stone. The patient did remarkably well. The overlooking a stone was illustrated by the third case, which was performed in February, 1884. This was a lumbar operation. A second smaller stone, situated higher up in one of the calyces, was overlooked. Drainage was practised, and gave some relief for a time, but suppression of urine followed. The other kidney was of considerable size. In April and in June, 1884, Mr. Thornton had two successful cases of nephro-lithotomy by the lumbar incision. In the first case the incision healed rapidly; in the second the healing was slow, and the sinus frequently reopened, but eventually the case got well. The fourth case was that of a French woman, aged fifty-nine, who was in a bad state of health. Mr. Thornton returned to the combined method in this case. But death occurred with suppression of urine in less than twenty-four hours. The fatal result was largely to be attributed to the exhausted state of the patient. She had taken a considerable quantity of morphia; the operation was prolonged; the stone was but a small one; the urine fairly healthy. The fifth case was a second operation on Case 1, reported in the *Medical Times and Gazette*. The sixth case was begun as an abdominal nephrectomy, but the kidney was found not to be removable; it contained a large stone; a counter-opening was made in the loin; the case eventually did well, though the sinus remained discharging for some time. The seventh case was that of a military officer, seen in consultation with Mr. Morrant Baker; the combined method was practised with perfect success. The other two cases were also completely successful. In discussing the general question, Mr. Thornton said that surgery should be exact. The more exact it was, the more successful would be the results. The lumbar nephro-lithotomy never will or can be exact. Surgeons have even failed by it to reach the kidney. For example, both he himself and Mr. Morris had missed the stone by this method. Though the kidney tolerated the knife, still we should all agree that it should not be needlessly incised. It was doubtful what the effect of puncturing the kidney was; punctures and incisions might lead to deleterious changes in the organ; the ultimate history of cases that had been submitted to the punctures would prove of value and interest. The more common the operation of nephro-lithotomy became, the more kidneys would be unsuccessfully explored, the greater would be the mortality, and renal surgery would lose in reputation. Mr. Thornton referred to his previous position with regard to the two operations as expressed at the Royal Medical and Chirurgical Society last session, and said he now felt disposed to go further, and to assert that the combined operation was the correct one, for we should never fail to find the kidney, never cut into a healthy one, and leave the one with the stone; never damage the peritoneum, as by puncture, without knowing it, and we could examine the other kidney and both ureters. The stone would be removed through a small clean cut in the loin, which was far preferable to the method of dissection, since this latter allowed of infiltration of tissues and favoured the chances of severe inflammation and sepsis; and, finally, the combined method allowed of a thorough examination of the kidney, so that a decision could be come to which was the best operation—nephrotomy or nephrectomy—for the individual case. He said that Mr. Morris had objected to the abdominal exploration as being inefficient for perfect palpation, but his own experience did not bear out this belief. The whole investigation could be carried out with much less doubt and with greater safety for the patient, for a fairly accurate knowledge of the state of the other kidney would be ascertained. The only possible objection to the combined method was that it made two wounds; but counter openings were made everywhere in surgery, and why not in renal surgery also? The real objection was doubtless a dread of the peritoneum, but this was unfounded, and his own experience was that with strict asepticity the peritoneum tolerated operations as well as, if not better than, any other tissue of the body. Finally, Mr. Thornton made some remarks on the subject of referred pain, and said that in some of his cases the pain was referred to the other kidney, and might have led to the wrong kidney being operated on, with possible disastrous results. Ovarian pain was sometimes referred to the side opposite to that of the diseased ovary.

Mr. BERNARD PITTS briefly referred to three cases of exploration of kidney by the lumbar incision that had recently been under his care. The first was that of a woman with large suppurative scrofulous kidney; here no stone was found, but great relief was given by the drainage, and but little discomfort was occasioned from the resulting urinary fistula. In the second a stone was discovered and removed, but there was also a suppurative condition of the kidney. For one month the patient did well, but there was a constant discharge of pus from the lumbar wound, though no urine was ever detected with this discharge. This patient then suddenly developed inflammatory symptoms, and died after several weeks of continued fever; and it was found that there was a diffused suppuration behind the kidney, which extended along the aorta into the thorax. A second small stone was found embedded in the upper part of the organ. In the third case, which had been explored through the loin six weeks ago, a calculus was removed, and again a suppurative pyelitis was present. Great relief was

given by the operation in this case, but suppuration still continued, and no urine had been detected with the discharge from the loin. Mr. Pitts would like to ask those who had had experience in these cases whether one might assume that a kidney was no longer active if, after incision into its suppurating pelvis, no urine escaped at any time with the discharges. He regretted that in the second case he had not removed the organ, and so possibly saved the patient, and stated that in the last case he had felt it right to advise the man to have the kidney excised, since he believed it to be useless, and likely to continue to suppurate. Owing to the enlargement of the kidney, and to the narrowness of the interval in this case between the ribs and the crest of the ilium, it would be difficult to remove the kidney from the loin; and if the abdominal cavity was opened, it would be difficult, with the suppurating sinus present, to ensure perfect antisepsis.

Mr. MORRANT BAKER referred to a case, which he showed as a living specimen, of a young man aged twenty-three who had suffered from hydro-nephrosis for some years before 1881, when the large cyst was opened and drained. The patient was subsequently shown at the International Medical Congress, at which time he was wearing, slung to his side, a leathern bottle, into which several ounces of urine were discharged daily. Subsequently his health began to fail, and in Dec. 1882 the kidney was removed; the large cyst, the boundaries of which were beyond the reach, not only of the finger, but of a long metal sound, was left, Mr. Morrant Baker thinking that any attempt at its removal in its suppurating and probably adherent condition might involve wide exposure of the peritoneal cavity, and be very perilous. He thought, also, that the removal of the secreting organ might lead in time to withering of what would become a useless receptacle. The patient recovered well from the operation of nephrectomy, and the ultimate result justified the plan adopted, for in about two years after the nephrectomy the cyst had contracted to about the size of an orange, and was found filled by a quantity of offensive putty-like material, the removal of which with free drainage was followed by complete recovery.

Mr. GODLEE said that although he was not much enamoured of the so-called combined operation, and not eager to perform it, he thought it only right to mention two cases, which might be adduced as favouring the position held by Mr. Thornton. The first of these cases was that of a young man, who had come from South Africa for the relief of most urgent symptoms pointing to stone in the right kidney, and was under the care of Mr. Marcus Beck at University College Hospital. Mr. Beck exposed the kidney fully and punctured it freely with needles, but detected no stone. The wound closed readily and rapidly, but the patient was unrelieved. Afterwards he came under Mr. Godlee's care, and the kidney was again exposed, incised, and carefully explored with the finger, but no stone was found. A few days later this patient passed a small stone. It was conceivable, though not certain by any means, that, through an abdominal incision this stone might have been detected in the opposite kidney, supposing it possible, as Mr. Thornton suggested, that a stone in one kidney may cause colic on the opposite side. He observed, in passing, that considerable fibrous thickening around the kidney had resulted from the first operation. The second case was that of a young man who had a stone impacted in the right ureter, which led to disorganisation of the kidney. An abscess formed around this kidney, which was opened; but at the operation it was impossible to discover the kidney itself. Some months afterwards the patient died of suppression of urine, coming on during one of his frequent attacks of colic, and no doubt partly caused by the opium taken to relieve the pain. Even at the post-mortem the kidney could hardly be detected, as it was reduced to a flabby bag of pus. The other kidney was enlarged and fairly healthy. Here, again, it was possible that an abdominal incision might have resulted in the discovery of the stone in the ureter, and thus have led to an incision being made into the suppurating kidney, and the evacuation of the pus might conceivably have again started the secreting action of the sound organ. On the other hand, there appeared to be objections to the abdominal incision besides the one on which Mr. Thornton had specially dwelt. To begin with, a danger to which he had alluded was a very distinct one—viz., that of causing a ventral hernia by incising the tight muscular abdominal wall of a strong man. But, besides this, it was possible that whilst a number of stones might be cleared out of a kidney which were causing no symptoms, a small one might escape the detection even of the experienced hand in the opposite kidney, which, after all, had been the cause of the colic; and, lastly, it was surely possible, if a stone can escape detection through a lumbar incision, when the organ can be felt above and below, and behind as well as in front, it might fail to be detected when the finger can only reach the anterior aspect. A case to illustrate this position was then detailed, in which a patient had for years suffered from symptoms referred to the bladder, which at last gave way to those of marked right renal colic. Mr. Godlee cut down on the right kidney, which was quite imperceptible on abdominal palpation, and found it lying very high up under the ribs. A stone of the size and shape of a tiger's claw was found quite at the back of the gland, and it was held that this would in all probability have been quite imperceptible on feeling the organ through an abdominal incision. He maintained that it was almost certain that the abdominal method would occasionally fail when the fact was borne in mind that the most urgent renal symptoms may be caused by stones of very minute size.

Mr. BRUCE CLARKE related a case bearing on the diagnosis of renal calculus. For one year the man had suffered from occasional attacks of left renal colic, and just before admission to the hospital had a typical attack, in which pains radiated along all the branches of the left lumbar plexus. Fortunately, before thinking of an operation, the tortuous state of the arteries was observed, and a considerable pulsation was noticed in the abdomen. Abdominal aneurysm was diagnosed, and at the necropsy it was found that the aneurysm had burst into the left psoas muscle and dissected out all the branches of the lumbar plexus of nerves. Death had resulted from rupture of the dilated aorta into the pleura. A second case was related as tending to show the value of an abdominal incision with preliminary exploration. The patient had passed several stones. A lumbar incision was made, but an hour elapsed before the kidney could be found. The patient was greatly wasted and cachectic. It would have been wiser to perform the abdominal operation. A small amount of calculous matter escaped from the lumbar incision. Death followed in three days from anuria. At the necropsy fatty and amyloid degeneration of all the viscera was observed, and many disseminated stones were found in the kidney, but no distinct calculous mass. It would have been more satisfactory if the whole kidney had been removed at an earlier period.

Dr. BURNEY YEO asked the surgeons to answer the question, what were the precise indications for physicians to give up their own "unprecise" method and take to the precise method of surgery. He was not so fond of precision as to be enamoured of it. At Contrexéville patients were known to pass large numbers of calculi under the treatment pursued there. This treatment consisted largely of free drinking of the waters, some patients taking as much as six quarts of water a day.

Mr. PEARCE GOULD mentioned the case of a woman, forty years of age, from whom he removed a renal calculus last November. The history was that fifteen years before she had struck the right loin, the blow being followed by hæmaturia lasting a week. Ever since that she had had recurring attacks of renal pain, and for five years had been conscious of a swelling in the loin. When admitted to Middlesex Hospital she presented a fluctuating renal tumour in the right loin, with pyuria. The kidney was opened by the lumbar incision, and in the distended pelvis of the kidney an oval uric acid stone was found and removed. After three days urine ceased to flow through the loin, and within a month the wound was all firmly healed. The patient was shown before the meeting. Mr. Gould referred to the statistics given by Dr. Brodeur in his work on the Surgery of the Kidney. He had found 25 cases of nephro-lithotomy for simple renal calculus, with 2 deaths—the cases of Durham and of Bennett May; 66 cases of calculous pyelitis had been submitted to operation; in 44 of these nephrectomy had been performed, 34 by the lumbar incision, with 19 recoveries, 10 by the abdominal incision, with 5 recoveries; 16 had been treated by nephro-lithotomy, 13 by the lumbar incision, with 6 recoveries, 3 by the abdominal incision, all fatal; 6 had been treated by nephrotomy, only 4 of which had recovered. These statistics, like others, were not complete, as many cases had not been recorded; but they were the most recent and the most important that had been compiled. He referred to the fact that many cases had occurred where the

diagnosis of renal calculus had been made by competent observers, and on exploring the kidney no stone was detected, but the operation was followed by complete relief of the symptoms. Two such cases had occurred in his own practice. On the other hand, all must have met with cases of renal calculus which had not given rise to any symptoms during life. In reference to the abdominal operation, he thought Mr. Thornton was disposed to regard too lightly the importance of opening the peritoneal cavity, and his assertion of the tolerance of the peritoneum to operation, provided the wound was kept aseptic, applied equally to all other tissues.

Dr. S. COUPLAND thought that the method of treatment known as lithontripsy might have to be practised for months and years before any appreciable effect would be made on the size of the stones, and during all this period the patient might have to suffer from severe symptoms, whilst the kidney would be injured by the presence of the foreign body or bodies. Post-mortem experience showed how injurious the effect of stones in the kidney could be. He considered that the remarkable success of surgery of the kidney ought to encourage physicians and patients alike to resort to the simple surgical method of removal as infinitely preferable to the slow, uncertain, and possibly perilous methods of medicine.

Mr. T. SMITH thought it was easy to generalise too positively, and to regard certain methods of operation as infallible in ascertaining whether there was a stone. If it were Mr. Thornton's contention that by the combined method it would be impossible to overlook a stone, he could not concur; for he knew of cases in which most careful palpation of the kidney, and even pressing it against a solid table, was unable to diagnose the presence of a stone in the removed organ. It was possible, also, that the peritoneum would not behave with equal benignity to all surgeons as it did to Mr. Thornton. He thought that Dr. Coupland took too gloomy a view of the patient's condition in cases of renal calculus. At Contrexéville, as Dr. Yeo had related, patients passed stones and led comfortable lives—nay, even lived to form other stones. A kidney that had once formed a stone was very likely to form another, thus requiring repeated operation. A three weeks' course at Contrexéville might effect wonders for the patient. He had no objection to perform the operation of nephro-lithotony; in fact, was yearning to do it. But having three near relatives suffering from renal calculi, and knowing that they had passed several stones and yet lived a fairly happy life—one relative was so little injured in general health as to be able to ride forty miles on a tricycle,—he should hesitate to resort to surgery when such simple means as abundant drinking of water would effect so much relief. One of his relatives drank six pints of warm water every day, and described the effect of drinking it as refreshing and exhilarating. This patient had had plugging of the common iliac vein, and an abscess had burst into the intestine. Yet he now led a comfortable existence. As to the water, the only precaution to observe with regard to it was that it should be drunk whilst it was very hot, and on an empty stomach.

Mr. K. THORNTON believed that it would be easier to detect a stone in a living kidney than in one that was removed from the body, and in which the circulation had ceased.

Mr. HENRY MORRIS said that in the five minutes at his disposal it would be impossible to reply adequately to all the observations that had been made, so he should confine his remarks to the question of the relative merits of the lumbar and abdominal methods and to the point raised by Dr. Burney Yeo. As to Mr. Thornton's objections to the lumbar nephrotomy, he admitted that some of the objections might hold good, but contended that even by the combined method the stone could not be located with certainty, and that, indeed, there was nothing very advantageous that could be claimed for the abdominal incision. The lumbar wound might heal as rapidly as possible, so that he could not concur in Mr. Thornton's remarks about the necessarily slow healing of this wound. He illustrated the rapid healing of the lumbar wound by reference to cases that had been under his care. The freedom from fatality and misfortune, the absence of any difficulty in finding the kidney, and the ease with which the various surfaces of the kidney could be palpated were some of the advantages of the lumbar operation. What was wanted was greater precision in diagnosis, and he suspected that some cases of failure to find the stone might be attributed to this want. When the kidney was thought to be the seat of mischief, in cases of pain resembling renal colic, he thought that the directing of the attention to the prostate in the male, and to the ovary and Fallopian tubes in the female, would lessen the chances of making an erroneous diagnosis. The more accurate the diagnosis, the fewer would be the failures to find the stone. In answer to Dr. Yeo, he would say that when the Contrexéville and water-drinking treatment had been tried and the patient still possessed the symptoms of stone, then the physician might reasonably, and without fear or trembling, call in the surgeon, who would in a short space of time effect far more for the benefit of the patient than would any amount of water.

Mr. BENNETT remarked that the direct sounding of the kidney by freely puncturing the organ was a frequent practice at St. George's Hospital, and the results of this practice were most encouraging.

Mr. Howard Marsh did not reply owing to the lateness of the hour.

The following living specimens were shown:—Dr. A. H. Robinson: Case of (?) Congenital Cretinism and Myxœdema in a man aged twenty-three. Mr. H. H. Clutton showed a case of Lupus with Ulceration of Palate and Phthisis, and a second case of Tubercular Ulceration of Palate. Mr. H. Morris: A successful case of Nephro-lithotomy. Mr. Battle, for Mr. Sydney Jones: A case of Rheumatoid Arthritis in a girl aged six. Sir Dyce Duckworth: A case of Heart Disease with Rheumatic Nodules.

MEDICAL SOCIETY OF LONDON.

Removal of both Superior Maxillæ.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. LEOPOLD SERVAIS (of Antwerp) read a paper on Removal of both Superior Maxillæ for large tumours of the face. The first case was that of a boy aged nine years, living at Wouroo, Holland. The operation was performed on Oct. 10th, 1883. The tumour had developed at the expense chiefly of the right superior maxilla. Fergusson's method of operation was adopted. The cautery was used to stanch the bleeding. The roof of the orbit, the orbital plate, the nasal process of the right superior maxillary bone, and the larger part of the malar bone were preserved. Recovery was rapid. There has been no recurrence. The second case was that of a woman. The tumour had been slowly growing for eleven years; it was of enormous size and extremely painful. It had been treated by caustics. The tumour was successfully removed, and the patient was now completely well. The operation took five hours.

Mr. F. BOWREMAN JESSETT read a case of Sarcoma involving both superior maxillary bones and hard palate, with removal of the tumour, together with great part of both bones, ending in recovery. The patient was a woman, aged thirty-five. She first noticed a lump in the hard palate twenty-one months ago; it grew rapidly, and projected considerably into the mouth and interfered with eating and speaking. At the end of six months she went to Guy's Hospital, under the care of Mr. Lucas, when the tumour —a myeloid sarcoma—was excised, and its base scraped and cauterised. In June, 1886, she was in St. Thomas's, under the care of Sir W. Mac Cormac, with an extensive recurrent growth, which proved to be a very vascular sarcoma. In October, 1886, she came under Mr. Jessett's care. The whole of the hard palate and most of the soft palate were implicated. Respiration could not take place through the nose. On Nov. 9th the operation was performed. Two incisions were made extending from either angle of the mouth upwards and outwards towards the outer angle of the orbits. The whole flap, which included the nose, was reflected upwards over the forehead, and the whole of the tumour was thus freely exposed to view. With a fine narrow saw both superior maxillary bones were divided about half an inch above and parallel to the alveolar process. With a raspatory used as a lever this portion of the bones was separated from the upper and remaining parts. The separated bone was then seized with a lion forceps and the whole growth was gradually removed, with the exception of that portion which had grown into the left antrum. This was afterwards easily removed by the use of a Volkmann's spoon. There was scarcely any hæmorrhage. The skin flaps were brought together with hare-lip pins and the wound dressed with iodoform. She was fed with nutrient

enemata for the first twenty-four hours. The patient, who was shown, made an excellent recovery, and was still quite well three months after the operation. The growth was a mixed-celled sarcoma.

Mr. BRUDENELL CARTER spoke of the value of the revolving circular saw in the division of bone.

Dr. ANGEL MONEY said the tumour was a mixed-celled sarcoma, having a plexiform or columnar arrangement, and with some distinct myeloid cells.

Mr. MARMADUKE SHEILD said the tumour had an alveolar structure, and was composed of mixed cells, some of which had something of the appearance of myeloid cells, though they did not appear to have many nuclei.

Mr. J. H. MORGAN spoke of the historical value of Dr. Servais' paper, and congratulated him on the success of his courageous surgery.

Mr. H. ALLINGHAM referred to a case of removal of a tumour from the superior maxilla by Mr. Pick.

OBSTETRICAL SOCIETY OF LONDON.

THE annual meeting was held on Feb. 2nd, J. B. Potter, M.D., F.R.C.P., President, in the chair.

The following specimens were shown:—Dr. Amand Routh's specimen, which was exhibited at the last meeting of the Society, was reported by Mr. Alban Doran and Dr. W. S. A. Griffith to be a fibroid growing from the undeveloped horn of a uterus unicornis. Mr. F. A. T. O'Meara showed a Fœtus with the bladder so dilated and thickened that it nearly filled the abdominal cavity; the urethra was impermeable. Dr. John Phillips showed a dissection of a Fœtal Heart with two auricles and one ventricle, taken from a dicephalous monster. Dr. Horrocks exhibited an infant a week old suffering from Spina Bifida; the cyst had contained 50 oz. of fluid. Dr. M. H. Jones read remarks on the case.

Unilateral Galactorrhœa.—Dr. GIBBONS described this case. A lady, aged twenty-three, who had ceased nursing for six weeks, complained of constant running of milk from the left breast. After her first confinement she had nursed for five months with both breasts, when she had to give up on account of weakness, and an abscess formed in each breast and discharged for eleven months. After this, her second confinement, she at first nursed with both breasts, but the milk disappeared from the right one, and she continued with the left breast only for four months, and then discontinued, as it was thought that her milk disagreed with the child. Menstruation had not reappeared. There was no reason to suspect pregnancy, and there was no uterine disease. Although she was anæmic, the milk was of good character, and the amount that flowed was twenty ounces in twenty-four hours. Dr. Gibbons then enumerated the various remedies which he had used to arrest the secretion of milk, without result. These included arsenic, iron, strychnine, iodide of potassium, belladonna, bromide of potassium, quinine in large doses, compression of the nipple, opium, galvanism, faradism, rest and a dry diet. Menstruation appeared eleven months after the birth of the child, being preceded by a gradual diminution of the flow of milk, which continued over the second period and then ceased altogether, and the patient's condition became one of natural health. The author drew attention to the following facts:—(1) That the galactorrhœa was unilateral; (2) that the milk was of normal quality and quantity; (3) that there was no stimulus of nursing or of the genital organs; (4) while resisting all this treatment, it ceased spontaneously on the occurrence of menstruation. Authors were quoted as to the value of certain drugs in galactorrhœa, and cases were given illustrative of treatment by galvanism and faradism. Reference was made to the experiments of Roehrig to determine whether the nervous or vascular element has the greater influence over the secretion of milk, and resulting in favour of blood-pressure as the chief factor. Sinéty was also quoted, and, in conclusion, the speaker remarked that he had failed to find any case similar to the one brought forward. It was proposed and seconded that the discussion of this paper should be postponed till the next meeting of the Society.

The treasurer's report was adopted on the motion of Mr. Doran, seconded by Dr. Clapham, as were also the report of the hon. librarian, on the motion of Dr. Herman, seconded by Dr. Keele, and that of the Midwifery Board, on the motion of Dr. Playfair, seconded by Dr. Malins.

It was proposed by Dr. J. Williams, seconded by Dr. W. Black, and carried, that an alteration in the law regarding the meetings of the Society in January and October be made so that these meetings shall be held on the first Wednesday in each month, unless for some reason the Council should alter it—e.g., on account of the first day of the new year falling on a Wednesday.

The scrutineers (Drs. M. H. Jones and E. S. Tait) declared that the list of officers and Council as proposed had been adopted.

The President then delivered the annual address, which will be published in a future number.

A vote of thanks to the President for his address, and to the retiring officers and members of the Council, concluded the proceedings.

ACADEMY OF MEDICINE IN IRELAND.

Conservative Surgery in Diseases of Foot and Ankle.

AT a meeting of the Surgical Section held on Dec. 10th, 1886, Mr. WHEELER read a paper on Conservative Surgery in Disease of the Foot and Ankle-joint, in which he recorded several successful operations, including excision of the os calcis, of the astragalus, scaphoid, cuboid, middle, cuneiform, and metatarsal bones; also resection of the first phalango-metatarsal articulation. He described in detail the diseases requiring excision of the os calcis, the form of incision, and after-treatment. He condemned the subperiosteal operation in such cases. All his excisions of the os calcis were successful, and the locomotion of the patients was but little impaired. One of the cases he operated on died seven years after the operation from phthisis. The case of excision of the astragalus had been seen within a very recent period. The lady had a movable joint between the os calcis and malleoli, and possessed nearly equal powers in the foot operated on and in that unoperated on. In the case in which he removed the astragalus, os calcis, and the malleoli, with articular surface of the tibia, for disease of the bones, the patient had left for India last October, at which time he was able to wear a well-adapted boot and walk with the aid of a stick. Mr. Wheeler emphasised the necessity for carefulness in diagnosing the seat and cause of disease in the foot, likewise the stage the disease was in before undertaking partial operations.—The PRESIDENT had not found cases in which the disease was sufficiently limited to ensure satisfactory and permanent results by partial excision, and the want of such limitation was the chief reason why Pirogoff's operation was abandoned. Indeed, he was himself one of the first, if not the first, in this country to perform excision of the ankle-joint for caries, and he obtained what seemed to be a successful result—the wound healed and the patient had the use of his foot for two years; but at the end of that period the disease manifested itself again, and contemporaneously with it there was also evidence of tubercular disease of the lungs, which prevented further operative measures. Mr. Wheeler seemed inclined to disparage the subperiosteal method, without giving definite reasons. While the advantage of some excisions by that method were exaggerated, as in excisions of the elbow-joint, yet in others there was no doubt that it was useful, especially in the shoulder-joint, and the excision of shafts of bone, as the fibula, radius, and ulna; for in the young the preservation of the periosteum was of great importance. In excision of the elbow he did not think that better results were obtained by this than the older method.—Mr. CROLY had performed a great number of operations for disease of the ankle-joint, and he did not like the operation for excision of the os calcis. He had not had success in saving the foot where the disease seemed to be confined to the os calcis. He removed the os calcis by a horse-shoe incision where the rest of the bones seemed sound, but it turned out that they were infiltrated. He had had, however, a most successful case in private practice of excision of the os calcis for gunshot injury where the bone was shattered and shot had lodged in it, and the gentleman now had a useful foot. He had met with another case of great interest. A man fell off a horse injuring his ankle-joint, which exhibited all the evidence of compound fracture. Amputation was proposed, but the man refused to allow it. Months afterwards, when under his care, he cut down under the ankle-joint and found the astragalus was detached, and that the tibia had come down and accommodated itself on the os calcis. The man was now engaged as a coachman and

groom with a useful foot. The advantage of saving the periosteum of the os calcis bore no comparison to that of saving the periosteum of the shaft of the bones.—Mr. BARTON distinguished between caries from disease of the bone and that from accident, which was approached by the surgeon on different lines. The experience of the practical surgeon was unfavourable to gouging or partial operations where there was extensive caries or the disease was diffused. Hutton, who had operated as Mr. Wheeler did, discountenanced the then new procedure as leading to an unsatisfactory result, and yet Mr. Wheeler, by removing a similar amount of bone without following the same line of incision, had obtained success. He himself had attempted to save a foot of which the disease was only partial, and his experience was that while he had been successful in some cases, yet in a great many he had been unsuccessful, and it would have been better for the patients had he performed Syme's operation at first.—Mr. FRANKS said the unsatisfactory results of partial excision were due in the first instance to foci of disease being left untouched, and, secondly, to operating on patients who had sunk so low in health that they had no recuperative power in them. At the same time, the condition of the patient was often made too much of in these days of antiseptic surgery, and therefore conservative surgery might be adopted with more hope than before. In tubercular disease, however, health was a great factor: everything depended on the constitution of the patient, and caries sometimes got well without operation at all. The tendency of surgery was to the partial excisions, especially in view of the success achieved by Ollier of Lyons, who was a great advocate for subperiosteal operations. It was obviously better to leave a periosteum that could develop bone rather than excise it with the bone, and hope for a pad of cicatricial tissue to walk upon.—Mr. HENRY FITZGIBBON remarked that, in considering the question of excision, the main point was what was the primary cause of disease in the bones. The great distinction was between disease of bones resulting from accident and disease arising from constitutional cachexia.—Mr. WHEELER replied.

Addison's Disease.—Select Clinical Reports.

At the meeting of the Medical Section held on Dec. 17th, 1886, Dr. DOYLE read a paper on a supposed case of Addison's Disease occurring in a dark-complexioned female somewhere between twenty-two and twenty-five years of age, having brownish and bronze-looking pigmentation of the temples, cheeks, backs of hands, and front of legs. Constitutional symptoms preceded the pigmentation by nearly three months. Ill-health first commenced with an unhealthy ulcerated condition of one of her fingers. This patient was said by her friends to have recovered, but that slight discolouration remained along attachment of the hair to the temples. The chief interest connected with the case was to discover the primary disease that gave rise to weakness, lassitude, vomiting, cough, fever, and discolouration.

Dr. A. W. FOOT read a communication styled "Notes of some Unusual Cases observed in Hospital Practice." One was a case of obstinate vomiting from "land-sickness," which continued for nine days after the man had come ashore. Another was a case of mistaken identity on the part of four persons. The man was living, but comatose from alcohol. A husband, wife, and two of their daughters claimed him as their son and brother—wrongfully as it turned out. There was a case of well-marked articular gout in a hospital patient, very corpulent, and long addicted to porter-drinking. The series concluded with an account of a man who was firmly convinced that he was the source of an offensive effluvium which made his presence unbearable and even injurious to others—animals as well as men. Dr. Foot called this, and some similar cases which he alluded to, by the provisional name of "subjective osmidrosis." The question was discussed of an hallucination of smell or organic irritation of the sensory centre.—Dr. COX said he had himself a tendency to sea-sickness which lasted for some hours after he came on shore. He had had two cases of acute articular gout. One was that of a butler, who was considerably improved under a treatment of colchicum and lithia, and subsequently iodide of potassium. The other was that of a policeman; bromide of lithia gave him considerable relief, and the administration of salicylic acid seemed decidedly beneficial. Other patients he had seen relieved by ointment of belladonna and iodine, with powder of opium or the extract of opium. With reference to the curious case of delusion, he might state that at present he had under treatment a man who was sensitive of emitting a disagreeable smell, which might be the result of disease of the bones of the nose or of mischief at the back of the pharynx.—The PRESIDENT had himself been consulted three years ago by a gentleman on account of a bad smell which, he said, emanated from his body and made him offensive to everyone around him. He saw that the gentleman was under a delusion, and endeavoured to convince him of the fact. Once afterwards he again saw this gentleman, who had, he believed, given up the idea. As to remedies against hallucination, even specialists seemed to have forgotten the great results published many years ago by Seymour of London as to the value of opium in cases of hallucination and melancholia.—Dr. FOOT replied.

MIDLAND MEDICAL SOCIETY.

A MEETING of this Society was held on February 2nd, Mr. Lloyd Owen, F.R.C.S.I., President, in the chair.

Gunshot Wound of Vertebra.—Mr. J. T. J. MORRISON showed a man aged twenty-five who nine weeks ago, in a fit of depression, shot himself in the mouth, discharging a No. 7 conical Eley bullet from an ordinary revolver. On admission there was some shock, but no loss of consciousness. The tongue and palate were blackened with powder; the soft palate presented a round perforation, through which the tip of a finger could feel an opening in the bony wall of the pharynx; a probe passed through this aperture, traversed a canal about an inch in length in the bone, and impinged on a hard substance at the bottom. There were no signs of spinal concussion or hæmorrhage. No operative treatment was adopted for the extraction of the bullet. The patient is now in excellent health, the hole in the vertebral column being filled up and its place indicated by a slight elevation.

Fractured First Rib.—Mr. A. F. MESSITER exhibited a specimen of fracture of the first rib from a man aged seventy, who had been run over by a cart, and died shortly after admission from collapse. At the post-mortem examination the sternal end of the right clavicle was found to be dislocated forwards; the first rib was broken at the spot where the subclavian artery passed over it; the second was fractured at its middle, and the third and fourth behind their angles, the latter wounding the lung; there was no other injury. Mr. Messiter considered that the clavicle after dislocation was pressed down on the first rib, thus fracturing it by direct violence. The periosteum was torn on the under surface of the bone, but was intact on its upper surface.

Mr. J. W. TAYLOR showed some Female Catheters made of Glass. He uses them for operation cases whenever a catheter is required, and finds them very clean and inexpensive. He also exhibited his "Artificial Amnion," a simple form of uterine dilator and tampon. Both instruments may be obtained from Messrs. Mappin of Birmingham.

Rupture of Abdominal Aorta.—Mr. L. TAYLOR showed for Dr. Oliver Field a specimen of Rupture of the Abdominal Aorta, taken from a boy aged eight. Half an hour before his admission to the hospital he was run over by a brewer's cart. On admission he was suffering from great shock and was much blanched, the abdomen being moderately distended; he died in an hour. On post-mortem examination a considerable quantity of blood was found extravasated behind the peritoneum, and there was a large rent in the abdominal aorta, where it divided into the two common iliacs, the abdominal viscera being uninjured.

Mr. DONOVAN read a paper on "Some points in Therapeutics."

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

A MEETING of this Society was held on Jan. 4th, Dr. S. A. Smith, President, in the chair, when the following specimens were exhibited:—

Mr. VINCENT JACKSON showed a girl aged fourteen, sent to him on account of alarming symptoms occasioned by the presence of a large adenoid bronchocele. To relieve her symptoms of asphyxia Mr. Jackson completely divided the very broad isthmus, and removed a small portion. The operation was followed by complete departure of the distressing symptoms, and by a visible diminution of the size

of the tumour, amounting, as ascertained on measuring the circumference of the neck, to one inch. The wound healed quickly.

Dr. EVANS showed a case of Splenic Leucocythæmia in a child aged twelve. The spleen extended down to the pubes, and occupied the greater part of the left side of the abdomen; it had grown rapidly during the last two months whilst under observation.

Mr. VINCENT JACKSON exhibited (1) a large loose cartilage removed from the right knee of a gentleman aged thirty-two. Its removal was accompanied by a free incision of the skin and capsule of the joint. A rapid recovery followed in fourteen days. The operation was done with antiseptic precautions. A drainage-tube was kept in the joint for two days. Also (2) a large multilocular ovarian tumour of almost solid character successfully removed from a woman of fifty-two years of age. It was connected by tough adhesions to the walls and contents of the abdomen, and an innumerable quantity of bleeding points required deligation, including some on the intestinal walls. Rapid recovery followed the operation. A glass drainage-tube, withdrawn at the fourth day, was used.

Intestinal Obstruction and the Difficulties in the Way of Diagnosis.—Dr. TOTHERICK read a paper on this subject, and remarked that in this respect age had an important bearing, for in children the cause was generally either intussusception or peritonitis, and in aged persons either impaction of fæces or malignant diseases. He advocated the use of repeated enemata of water or oil in those cases due to impaction of fæces. In acute cases, where the diagnosis is uncertain but the fatal termination sure, exploration by abdominal section was advised. Of all drugs opium was most generally useful, and in cases of impaction saline aperients might do good. In simple inertia of the bowels due to repeated constipation and over-distension he had found faradaism very useful.

PLYMOUTH AND DEVONPORT MEDICAL SOCIETY.

THE monthly meeting of this Society was held at Plymouth on Wednesday, Feb. 2nd, Dr. C. Aldridge presiding.

Mr. W. J. SQUARE read an interesting paper on Cystic Tumours of the Breast, and related a recent case of Lymphatic Cyst treated by Evacuation, followed by the continued application of a liniment after Sir B. Brodie's formula, with excellent result.

Dr. BAMPTON opened a discussion on the Treatment of Typhoid Fever, advocating the use of quinine in large doses and cold applications to combat hyperpyrexia, where the cold bath treatment was not practicable, or where tepid sponging was insufficient. The administration of antipyrin had in his hands been followed by marked lowering of temperature, accompanied by profuse sweating, and succeeded by refreshing sleep. No untoward symptoms were manifest. Maltine was suggested as a valuable dietetic adjuvant. Stress was laid upon the cautious return to farinaceous food or fish at a considerable interval after the normal temperature had been reached. The routine treatment of cardiac exhaustion in the later stages of the fever with brandy was pointed out to be a mistake, and a more scientific and rational discrimination, based upon a knowledge of the different qualities and properties of the various alcoholic liquors, in the selection of so potent a remedy, was pleaded for. The more highly etherised wine, as old sherry, was indicated in cases of cerebral or cardiac exhaustion. Surgeon Russell, A.M.D., bore testimony to the efficacy of the cold bath treatment, not only in controlling and lowering hyperpyrexia, but also its ability to prevent its access. An interesting discussion followed, to which a large number of members and visitors contributed.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—The annual festival in aid of the funds of this institution was held on the 9th inst., the Right Hon. the Lord Chancellor (Lord Halsbury) occupying the chair. During the evening, the secretary, Mr. Burford Rawlings, announced that the subscriptions received towards the Jubilee Fund amounted to £1183. The object of this fund is to enable the whole of the hospital accommodation to be taken into use, wards containing fifty-five beds out of a total of 180 not having been as yet in occupation.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

TUESDAY, FEBRUARY 15TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

As soon as the Council was formed,

Dr. MCVAIL, on a point of order, said he desired to raise a question with reference to the appointments of several of the members, which he said had been made by the Senatus Academicus of the Scotch Universities.

The PRESIDENT interposed, and stated that the question about to be raised by Dr. McVail could not be brought forward without notice of motion.

Dr. MCVAIL said he would give the requisite notice.

The PRESIDENT then delivered his address to the Council. He said:—"The difficulty of condensing within reasonable space the topics which demand the attention of the Council has never been as great as on this occasion. The Council now meets, for the forty-first time, enlarged, under the Medical Act of 1886, by seven members, with the addition, since the Act passed, of a representative from the Victoria University. These eight members, with a newly-appointed Crown Nominee for Ireland, and a new member for the Apothecaries' Society of England, form almost a third of the entire Council. It would seem, therefore, culpable not to endeavour to place before you a short statement of the work that lies before us. This is the less easy, because, although every member of the Council is acquainted with our duties, yet most would admit that we do not all look at them from the same point of view. Of this, however, I am sure, that you will believe in my earnest desire to place before you, as briefly as possible, such facts only as have a practical bearing on the important work that brings us together to-day. We meet in the present year under conditions which have no precedent, and which can never recur. The year of the Queen's Jubilee, with all that this implies, suggests to every body of Englishmen who have been charged with national duties thoughts of change from the known to the unknown, even though they are, in the main, thoughts of thankfulness and hope, of progress and peace. In no public body can these thoughts, and the questions which attach to them, be more important and more deep than in one which fixes its attention on the changes which medicine has undergone in the last fifty years." The President then touched upon what he termed the progress of health notions during the Queen's reign, in regard both to curative and preventive medicine, and passed on to consider the progress of legislation in respect of medical education during the same period. "As regards the history of the duties assigned to the Medical Council," he said, "there is little need to concern ourselves. We have the power and duty to see (1) that no one legally enters the medical profession who is not fit for it; (2) that no one remains in the profession whose conduct has been professionally infamous; (3) that all necessary medicines may be officially sanctioned and scientifically prepared; (4) that due rights and privileges are accorded to all properly educated Colonial and foreign practitioners who are legally qualified in their own countries. It has taken seventy years of discussion to come thus far. An opportunity was lost in 1815. The agitation for comprehensive medical legislation began in earnest after 1830. A Bill was laid before Parliament in 1840. Principles of union were agreed upon by the great London authorities in 1848. In this same year a Bill was brought forward in vain by a powerful Minister, Sir James Graham, in concert with Sir Benjamin Brodie. Sir Benjamin's correspondence, consisting of hundreds of letters, about that date, is still in existence. All these and many other movements resulted, in 1858, in the Act which, constructed on broad principles, empowered, and therefore required, all the bodies connected with the legal authorisation of practitioners in medicine throughout Great Britain to place their education on adequate and uniform grounds. Twenty-nine years have passed, and now only last year has this been effected. Over the melancholy history of this delay a veil had best be drawn. Of the Act of 1858 we cannot, on the whole, speak too highly. Where it failed, it has failed through and by

reason of one canker of our nation—*amor sui, non patriæ*. Two expressions have been rife in this regard—and they have given rise to comment, and have caused offence on opposite grounds—the one, 'moral suasion'; the other, 'the battle of the shops.' These terms represent great forces in nowise peculiar to medicine. The former appeals to individual and to corporate conscience. The latter asserts the claim of supposed corporate interests. Seeing that neither of these forces rectified acknowledged evils, in 1870 the Government made an attempt to institute national licensing boards. The principles of the Government proposals were accepted by the Medical Council. These were to enforce uniform and adequate examination for entrance into the medical profession. Much fruitless labour has been expended in the sixteen years that followed, involving loss of time to the Council and to Parliament, and some loss of character to our profession. It is a sad chapter in the history of Parliamentary government and of free institutions. But this chapter is now closed, and closed in a remarkable way. There were two principles on which most persons with knowledge and of calm judgment seemed in 1870 to be thoroughly agreed—viz., (1) that the present Council was too numerous for the best form of executive, though perhaps this was an unavoidable evil in our day, pre-eminently a time of 'representation'; and (2) that the examining and licensing institutions were too numerous for uniformity of action. The Act of 1886, to which all who did not oppose it are practically parties, increased by a full fourth the number of this Council; and the institutions, with power to license separately, are more numerous by one than they were before. This is surely a strange result. It teaches a profound lesson for the future of medicine and of science. It is the lesson that it is an evil thing for a free country when its people and its institutions depend on Parliaments, and not on themselves, for matters which they themselves can, without compulsion, adjust and rectify. There are now, therefore, *twenty* independent bodies with power and duty to certify the fitness of the medical practitioners of Great Britain to practise every part of their profession; to grant higher titles to those who possess knowledge, general or scientific, or practical, higher than is essential for the generality; and to combine together for this national end in whatsoever manner they may severally determine. Once again the institutions are free, and, being free, are once more on their trial. It is almost needless to state here that while eleven universities still remain separate, the licensing corporations have combined, or are combining, into one in Scotland; they aim at becoming either two or one in Ireland; and they are two in England. When this is done there will be in all sixteen separate examining boards. A movement is in action in England to make a sixth degree-giving body, to be designated a university. Should this be accomplished, there will then be in England only one medical corporation. Whether these arrangements will hold, whether they are the best, whether some Government will arise to constitute three divisional licensing boards, as recommended by the Royal Commission on the Medical Acts, are matters on which it were idle now to speculate, and which do not concern this Council as a State-appointed Council of Education. We here lament the time that has been occupied, though necessarily occupied, in doubtful questions, administrative and political. These belong to another arena, and to voluntary associations. The work of regulating education by calm consultation of representative teachers from every part of the country has become great enough when we consider the vastly increased mass alike of medical knowledge and of opportunity. But it cannot be said that the principles of medical education are altered. That education must always be, as it always has been, though in varying proportions and of various quality, threefold—general, scientific, and practical. As regards the course of discussion and action which led up to the Act of 1886, it would improperly waste the time of the Council to say much. Not that the Governments of this period are justly to be blamed. The two great political parties have faithfully striven to do their best for us. Four Government Bills have passed the House of Lords, each of a more or less complete character. Discussions within the profession have practically checked the full proportion which these Bills proposed to give to a national system of medical education and examination. Voluntary boards, more or less complete, in England, in Scotland, and in Ireland, have been formed, dissolved, and in other guise formed again. And at length the Act which brings us together with our present numbers is law. As I have already said, eleven universities and nine licensing corporations are free to act as they will, within certain conditions. These conditions are practically defined by this Council, or by the Privy Council, or by both. They are chiefly to enable and require every body to examine and to license in every department of medicine: Universities in all subjects; Surgeons in medicine and midwifery, as well as surgery; Physicians in surgery and midwifery, as well as medicine; Apothecaries in all. As heretofore, any combinations may be made among the bodies with the view of combining and nationalising institutions still separate and numerous. And so ends the system of double and treble qualification, which has been the result of accident and the imperfect knowledge of former days, and the source of heartburning and confusion in our own. It remains now for this enlarged Council to bring clear and harmonious effort to a national task of interest and importance, interest and importance which are ever growing as biological science extends, as conceptions of national life and national conscience rise, and as the relations of the human family throughout the globe, and especially of the English-speaking race, are drawn more close, and are better understood."

The President then referred to the educational inquiries of the Council from its commencement, and to the business to come before the present Council, pointing out that the Council could delegate whatever it pleased of its multifarious business, except its judicial functions and condemnatory representations to the Privy Council, to the branch councils or special committees. He concluded thus: "I am painfully aware of the hopeless task which I undertook in making the abstract of medical progress in England which I have presented to you to-day. Of foreign countries I have not attempted to speak. Still, it seemed to be a clear duty, at this stage of the Council's history, to attempt a rough catalogue of the chief points which this Council has had before it during the last twenty-nine years, in its endeavour to establish the basis of a sound and uniform training for the medical student of the future. It has had much support from Government, and whatever aid can be derived from abundant criticism. This last would have had more real value had it fully appreciated the difficulties of a period of progress never equalled, and of changes in institutions naturally tenacious of their past. In dealing with the education of the medical student, we now are dealing with a subject which depends on some of the most difficult departments of science. For the science of medicine is in touch, on the one hand, with the science of many of the inorganic constituents of our earth, on whose nature there have of late been made fresh revelations from day to day; on the other, with the world of mind wherever manifested in living things. It is daily face to face with the tyranny of everlasting all-pervading Law, and yet is open to every ray of light by which from time to time is darkly shown the Cause of all. It cannot overlook the actions and reactions of matter and mind. It is entangled among the mysteries of Evolution and the effects of Heredity. It must note the decay as well as the growth of the individual and of the races of men. It revises with unsparing hand the data on which have rested the *juventia et lædentia* of life which had the blind faith of our fathers before experiment altered some foundations of accepted clinical fact. It has to recognise as a stern reality that in some manner the laws of all other living things are the laws by which, free-will notwithstanding, we also have our being. It explores what connexion may be found in the origin and development of all living things. It has to struggle for the alleviation, though it does not trouble itself to solve the mystery, of pain. It seeks to appreciate what are the principles of the universal pathology which underlie the life history of the vegetable world, and the bodily sufferings and the mental agonies of man and brute alike. It is the function of this Council to represent interests intimately connected with all these topics through the seats of universal research and universal learning. It considers the long experience of the institutions which watch over the practical and beneficent exercise of the healing art, and which are in sympathy with the whole body of faithful workers among practitioners. The Council has to contract the impossible and unnecessary in education into that which is possible and necessary; it must so limit purely scientific studies that they may be directly subservient to the health and the wants of the public as distinguished from the profession of medicine—

that public whose welfare is here expressly represented by the Crown. We live, in short, in a constant endeavour to advance the study of an art which ultimately will rest on science, and to ensure such progress and knowledge as will give us scientific practice not divorced from rational empiricism. It is no slight happiness to those who have long watched the changes of our time to know that there are now in our medical schools many who, judged by the tests of love for truth, desire for knowledge, and benevolence of purpose and personal character, may stand comparison with any youths of any place or any profession. To them belongs the task of reaping the harvest of knowledge which this age has sown, and which cannot yet be fully gathered in. Many have the temper of reverent and earnest inquirers into the order of things under which, for a little span, we have all been placed, and in which they, being in constant contact with the sufferings of other men, have deep concern. In their progress and in their lives will be the great reward of the Court of Education."

It was moved by Mr. MARSHALL, seconded by Dr. HUMPHRY, and agreed to—"That the President's address be entered in the Minutes, and that the thanks of the Council be accorded to the President for this address."

The Finance Committee having been appointed, a table showing results of professional examinations held in 1886 for qualifications granted under the Medical Act by the bodies named in Schedule A of the Act, also a table showing results of preliminary examination in 1886, compiled by the registrar from such returns as have been supplied by the examining bodies, pursuant to the Council's request, were presented.

With reference to the latter table,

Dr. A. SMITH called attention to the fact that the Apothecaries' Society of London had passed 214 candidates and rejected 447, and that the Faculty of Physicians and Surgeons of Glasgow had passed 65 and rejected 159. These results, he said, showed either that the examinations of the bodies in question had become much more stringent, or that the education of the candidates was very defective.

Mr. MACNAMARA called attention to the circumstance that in regard to the highest percentage of marks obtained by the candidates, several of the universities had stated that information could not be supplied, and he urged the desirability of returns being made as to the lowest amount of information considered satisfactory by the examining bodies in preliminary education.

A table was then received showing the number of exceptional cases that occurred during the year 1886 in regard to the length of the course of professional study, together with a statement of the action taken thereon by the several licensing bodies; and another table showing results of professional examinations held in 1886 for qualifications granted under the Dentists Act.

With regard to the former table,

Dr. STRUTHERS said it would be observed that the number of exceptional cases had greatly decreased since last year. The only bodies in which they had occurred were the Royal College of Physicians of London and the Royal College of Surgeons of England, in which the number of cases was 39 and 22 respectively. That number seemed to be large, and to require some explanation.

Sir DYCE DUCKWORTH said that the cases that had occurred in the College of Physicians related chiefly to Colonial graduates. Only three or four had come from foreign universities, and in those cases the diplomas had been closely scrutinised, not only to ascertain that they were themselves genuine, but that the education was satisfactory.

It was resolved that the registrar should be directed to inquire in future into the details of such exceptional cases.

The usual communications were received from the Army and Navy Medical Departments, in answer to the applications of the Council.

A preliminary report by a subcommittee of the Executive Committee on the Visitation and Inspection of Examinations was presented, together with certain suggestions by Mr. Simon on the subject, and recommendations by the Executive Committee.

Mr. MARSHALL, in bringing up the report, suggested that the subject was so urgent and important that it ought to be dealt with by a larger body than the Executive Committee; and he proposed that the subject should be referred to a committee of the Council for consideration and report during the present session.

Dr. HERON WATSON seconded the proposal.

Dr. STRUTHERS said that the report proceeded on the assumption that the inspectors should be appointed only with reference to medicine, surgery, and midwifery in their limited sense at the final examination. He thought that the words of the Act had a more extended sense, and should be regarded as referring to all that led up to those subjects. It was as important to inquire into the earlier examinations as it was into the final. They were in reality the foundations on which the later subjects were built. He quite agreed with the suggestion of the committee that there should be inspectors for the three divisions of the kingdom, and that they should not be limited to one division. An international arrangement would certainly be the most satisfactory. As to the nature of the inspection, it should not be of so detailed a character as some former inspections.

Dr. HAUGHTON thought that the inspections should be confined to the final examinations. In the case of the universities, at any rate, the preliminary examinations might be left to take care of themselves.

Dr. QUAIN, in supporting the motion, said that the inspectors were not to be mere visitors, but were required to examine into the question whether the standard of proficiency was such as "sufficiently to guarantee the possession of the knowledge and skill requisite for the efficient practice of medicine, surgery, and midwifery."

Sir WILLIAM GULL moved as an amendment that the Council should on the following day take into consideration Section 2, Subsection 3, of the new Act with reference to inspection. If that course were adopted, the report of the committee could of course be considered.

Dr. MATTHEWS DUNCAN said that the old visitations might still continue with regard to preliminary subjects, and that the inspection required under the new Acts should have reference to medicine, surgery, and midwifery.

Sir WILLIAM TURNER said he concurred in the suggestion of Sir William Gull that the Council should take the special clause of the Act into consideration. If Mr. Marshall would embody in his resolution a reference of that clause to the proposed committee, it would be more satisfactory.

Mr. TEALE supported the same view.

Mr. SIMON thought that the Council ought at an early period to decide the question of the narrow or the enlarged meaning of the words "medicine, surgery, and midwifery," and not refer it to a committee for solution. That, he thought, would save time, and facilitate the labours of the committee. He should like at the proper time to move as a rider to Mr. Marshall's resolution, "That it be an instruction to the committee that the Council desires its inspection of examinations to cover the entire range of those branches of knowledge which it has declared in its Recommendations to be essential constituents of the qualification of a candidate for licence."

Dr. HUMPHRY said he would propose as a substitute for Mr. Simon's proposed rider the first recommendation of the Executive Committee—namely, "That, reserving for future action the visitation and inspection of the examinations in the earlier subjects of professional education, the Executive Committee recommends to the Council that the first year's appointment of inspectors provide for the inspection of examinations in medicine, surgery, and midwifery."

Sir WILLIAM GULL said he was willing to withdraw his amendment if it were understood that under Mr. Marshall's motion the whole bearing of the subsection of the Act would come before the Council.

Mr. MARSHALL said he was willing to include the consideration of Sections 2 and 3 in his resolution.

The motion was then put and agreed to in the following form:—"That Sections 2 and 3 of the Medical Act of 1886, together with the foregoing preliminary report by Dr. Humphry and Dr. Quain, on the Visitation and Inspection of Examinations under the Medical Acts of 1858 and 1886, with certain suggestions by Mr. Simon for the Council's future Inspection of Examinations, and the recommendations by the Executive Committee, be referred by the Council to a committee, to report on the subject to the Council at its present session."

The committee was then appointed, and Mr. Marshall was requested to act as chairman.

Mr. MARSHALL brought up various communications on the subject of diplomas in Sanitary Science for entry on the Minutes. He stated that the schemes and curricula all coincided in requiring that the candidates presenting themselves should be registered practitioners, and in some instances the candidates were required to be graduates in

medicine of the university giving the diploma, or of some other body.

A communication was received from the University of New Zealand, applying for the recognition of its diplomas. It was ordered to be entered on the Minutes.

Communications were also received from the Apothecaries' Hall of Ireland, and the King and Queen's College of Physicians in Ireland, with reference to a conjoint scheme of education and examination, and ordered to be entered on the Minutes.

The remainder of the sitting was held in the absence of strangers.

WEDNESDAY, FEB. 16TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

The Apothecaries' Hall of Ireland and the Conjoint Scheme.

Dr. STRUTHERS brought forward the following motion:—"With reference to the 'scheme for constituting an Examining Board in Ireland by the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland,' received and entered in the Minutes of Nov. 20th, 1886, page 154; and to the communications to the Council from the King and Queen's College of Physicians in Ireland of Nov. 10th, 1886, and the Apothecaries' Hall of Ireland of Nov. 9th, 1886, received and entered in the Minutes of Nov. 19th, 1886, page 145; and to the 'Remarks,' with Appendix, by the King and Queen's College of Physicians, of date Dec. 31st, 1886, transmitted to the President by the College on Jan. 5th, 1887, and the 'Comments' thereon by the Governors and Court of the Apothecaries' Hall of Ireland, transmitted to the Registrar of the Council on Feb. 3rd, 1887, and received and entered in the Minutes of Feb. 15th, 1887: that the Council request the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland to reconsider the scheme, in the strong hope that they may be able to arrange with the Apothecaries' Hall of Ireland a scheme which shall include the Apothecaries' Hall with the two Colleges." He said he did not appear in any way as a special pleader for the Apothecaries' Society, but as performing what he considered a public duty. It was somewhat difficult to frame the motion because there was not now before the Council any motion for the approval of the scheme; but they had the scheme on their Minutes, and therefore could deal with it. The motion was simply that the Council should advise the two Dublin Colleges to reconsider the scheme with a view of admitting the Apothecaries' Hall into a triple scheme. If the apothecaries were left out of the scheme what was to happen? By the Act of 1886 it was provided that a medical corporation might apply to the Council to have examiners appointed, and if the Council declined to do so the body might go to the Privy Council, and if it appeared to the Privy Council that the General Council had failed to secure the maintenance of sufficient examinations, or that occasion had arisen for the General Council to appoint assistant examiners, then the Privy Council might notify their opinion to the General Council, and if the General Council failed to comply with such directions of the Privy Council, the Privy Council might themselves appoint assistant examiners, and the Apothecaries' Hall of Dublin might be started as a new and independent licensing body for medicine, surgery, and midwifery. That was the prospect before them, and if that were the case they might have the profession in Ireland and England flooded with practitioners, whatever their professional knowledge might be, under the name of "apothecaries." This question had been discussed very elaborately on former occasions by the Council; and in 1863, in answer to an application from the War Office, the following resolution was agreed to: "That this Council is of opinion that the registered licentiates of the Apothecaries' Company of Dublin are as apothecaries entitled to practise medicine in Great Britain and Ireland." The result was that the army and other boards received the apothecaries' diploma on the same footing as any other medical licence. After tracing the history of the establishment of conjoint examinations, he said that the other Colleges of Physicians and Surgeons must make up their minds to part with a few of their privileges and fees, and that the examinations must be made, though upon "reasonable terms." He made the motion on three grounds: first as a measure of justice due to the apothecaries; secondly, as a matter of expediency to the other bodies; and thirdly, as a public duty. It was not for the interests of the public that these bodies should be tolerated as independent licensing bodies, flooding the country with practitioners with their name and qualification. He moved this as a measure of peace. If they had the three corporations united into a conjoint board, they would have an end to contention; if not, it would be every man for himself.

Dr. BRUCE seconded the resolution.

Mr. SIMON, in supporting the motion on the ground of the demands of public duty, said: Could any reasonable person say that it was for the public interest that a separate and competing examining board should be set up in Dublin? No one would contend that it was. In proportion as the College of Physicians felt itself stronger and higher than the Company of Apothecaries, it was bound to adopt the course which was urged upon it. *Noblesse oblige.* They ought not to allow any narrow personal feeling to stand between them and the completion of a scheme that would be for the general good of the country. It could never be for the public benefit that the two corporations should force the Company of Apothecaries into a position in which they would have to take refuge in the power of the Privy Council or the Medical Council to appoint assistant examiners. The Apothecaries' Company had been legally recognised, whether wisely or not, as a medical authority, and the question was whether they were prepared to assent to a course which would make that body a competing authority against the two Colleges in Dublin.

Mr. WHEELHOUSE maintained that the Company of Apothecaries in Ireland did not give a really full qualification. If, therefore, the Council advised the Colleges in any other sense than that of Dr. Struthers' resolution, it would be favouring the establishment of a new corporation very ill equipped for its purpose. He accordingly supported heartily the proposal of Dr. Struthers, believing that if the Apothecaries' Company were not admitted to the conjoint examination infinite harm and mischief would be done.

Mr. TEALE said he desired emphatically to endorse the motion, believing that its rejection would be a public calamity.

Dr. BANKS also supported the motion, and said that it would be discreditable to the Council if it favoured the creation of a new body in Ireland.

Sir WILLIAM GULL, in supporting the motion, said that the same principle would equally apply to this side of St. George's Channel. The Apothecaries' Company had a distinct function to perform, and on public grounds therefore it ought to be maintained. The Council, he thought, would stultify itself if it did not adopt the motion of Dr. Struthers.

Dr. GLOVER said that recent legislation did not contemplate the destruction of existing bodies, but rather their continuation. As therefore the number of bodies could not be diminished, the only hope they had was in their fusion. With that view, and believing that, after all, the pharmaceutical side of medicine was very important, perhaps more important than ever, he was quite prepared to give a hearty vote in favour of the motion of Dr. Struthers.

Dr. KIDD said that the feeling of the profession in Ireland was that the three bodies ought to be fused, and that it would be a very serious injury to the community if a body were established to compete with the two Colleges in their conjoint scheme. Such a rivalry would be a competition downwards, and not upwards. As to the legal position of the Apothecaries' Company, he would remind the Council that the College of Physicians accepted the first examination of that body as equivalent to their own first examination. He did not see how the dignity of the College of Physicians was affected. The intention of the Act of 1886 was to include the Apothecaries' Hall in any conjoint scheme, and it was the duty of the Council to encourage such inclusion.

Sir WM. TURNER said Dr. Struthers' statement was so convincing that he felt there was nothing left for him but to support the motion. There was one aspect of the case which was of very great importance—viz., what was in the mind of the legislature as regards this question when they framed the Act of 1886? They necessarily put into the front rank that which they considered to be the most important, and that was "combination." The mind of the Legislature was that combination should take place wherever it was possible, but that if through any difficulty combination did not take place, then that a body which could show that it was doing its duty efficiently should not be extinguished. What, therefore, they should urge upon the

bodies was that they should strive to carry out what he believed to be the prime meaning of the Act, and that the alternative proposition should not be required to come into operation if combination could be performed.

Mr. COLLINS hoped that the Council, if it passed this resolution, would also pass a resolution of which he had given notice—that they should nominate one examiner in surgery for the Apothecaries' Hall of Dublin, which he represented. If this was not done, and the recommendation of the Council was not adopted, the effect would be that that body would be disfranchised, at any rate till the next meeting of the Council in June. The Apothecaries' Hall were most anxious and willing to form a tripartite scheme, or if not a tripartite scheme a dual scheme, with the College of Surgeons.

Sir DYCE DUCKWORTH said he could not follow Sir William Gull in regarding this question as having brought before the consideration of the Council the other question which had to do with London. The question of the Apothecaries' Hall in Dublin, and its relation to the Royal College of Surgeons, was not at all on all fours with the question of the relations of the English bodies. The action taken by the London Colleges was perfectly well known. It had been taken after very full and careful deliberation. He entirely disagreed with the bugbear that had been held out as to the terrible consequences that they were to expect. They were told that a great injustice would be committed, that the country would be flooded with an inferior order of practitioners, and the public would suffer. He denied that the public would suffer from anything of the kind, because by the Act of Parliament it would be the duty of the Council to see that any other examination which might be adopted was one worthy the confidence of the public, and, therefore, if the Council did its duty the public would not suffer.

Mr. MACNAMARA said, as representative of the College of Surgeons in Ireland, it could not be expected that he should give a silent vote. The Council of the College of Surgeons had on several occasions gone to the College of Physicians to represent the justice of admitting the Apothecaries' Society into the conjoint scheme. He thought the resolution proposed by Professor Struthers, and for which he would vote most heartily, that the scheme should be sent back for the consideration of the College of Physicians, was a most desirable one, and it would be a sad thing if the College of Physicians would not listen to the voice of the Council on this point. A competing body would then be established in Ireland. He did not want to say that it would be an unworthy competing body, but it would become the duty of the Council to see that it was not so, and that would throw a great expense upon the Council.

The Council then rose for its customary ten minutes' adjournment, and on resuming held a private sitting, at which Mr. Muir Mackenzie attended for the purpose of giving legal advice. On the admission of "strangers,"

Dr. A. SMITH resumed the discussion on the motion of Dr. Struthers. After quoting from evidence given by Mr. Macnamara in 1874 to the effect that he considered that the present system of licensing in Ireland had been attended with a paralysing effect on the promotion of pharmacy, and that the Apothecaries' Company had abnegated their functions in becoming examiners in medicine, he proceeded to give an account of the proceedings taken by the two Colleges in reference to the application of the Apothecaries' Company to be admitted to the joint examination. When that application was received the Council of the College of Physicians held a special meeting, at which it was decided, *nem. con.*, that the Council of the College regretted its inability to accede to the proposal, because it believed that the intentions of the Medical Act were best carried out by the arrangement that had been made in accordance with that in force in England. In consequence, however, of a letter received from the College of Surgeons suggesting a modification of the scheme with a view of including the Apothecaries' Hall, another special meeting of the Council was held, and a resolution was carried by 17 to 4 declining to reopen the question of the constitution of the joint examining board. Under these circumstances he (Dr. A. Smith) thought it was hopeless to send the matter back to the College of Physicians for reconsideration.

Mr. BRUDENELL CARTER said he had for some time been familiar with the matter that had been brought before the Council by Mr. Muir Mackenzie, and he was quite prepared to hear that the Council could in no way control or influence the combinations of corporations. It would, he thought, be unworthy of the dignity of the Council to address a petition to the College of Physicians the prayer of which it had no power to enforce; he was therefore unable to vote for the motion of Dr. Struthers.

Dr. STRUTHERS briefly replied. He said that the opinion of Mr. Muir Mackenzie had nothing to do with the matter. The Council was only offering a piece of advice, and not seeking to exercise control.

The motion was then put and carried by 19 against 4, five members not voting.

The Council then adjourned.

THURSDAY, FEB. 17TH.

After a short sitting in private, Mr. Collins proposed a resolution for the appointment by the Medical Council of an examination in surgery for the Apothecaries' Hall in Ireland; but after discussion he ultimately assented to an amendment by Dr. Struthers deferring the consideration of the question until the result of the previous motion on the subject had been ascertained.

The Council then considered the subject of a memorial sent to the Privy Council, and thence transmitted to the Medical Council, complaining of the inefficiency of the clinical teaching of the Royal University of Ireland and of the inaction of the Medical Council. After some discussion the question was referred to a committee to report to the Council. On the motion of Dr. Heron Watson, a resolution was passed expressing the desirability of obtaining an opinion from the legal advisers of the Government in regard to the position of the Council in relation to medical authorities combining for examinations. Some discussion then took place in regard to the subject of dental finance, and the Council adjourned.

[A fuller report of this day's sitting will appear in our next issue.]

ON THE CAUSE OF MARKED HYPERTROPHY OF THE ANTERIOR WALL OF THE URINARY BLADDER.

To the Editors of THE LANCET.

SIRS,—On Jan. 18th I brought before the Pathological Society for criticism a novel and, I believe, an important fact which I had noticed whilst cutting frozen sections of pathological urinary bladders—namely, the increased muscularity of the anterior wall as compared with the posterior in certain cases of obstructive hypertrophy. In THE LANCET of the 12th inst. Dr. G. N. Pitt has given a very clear and certainly a very plausible explanation of that phenomenon. At the same time that I would acknowledge its partial value and partial truth, I would give my reason for having rejected the hydrostatic law that explanation is based upon, as being the sole cause for the production of the localised hypertrophy. Dr. Pitt says, "If membranes in the shape of spheres of varying sizes enclose fluid, so that the tension is uniformly distributed along each fibre, the thickness of the membrane must, by the principles of hydrostatics, be exactly proportional to the radius of the corresponding sphere"; and thus it is that the anterior wall, having a greater curvature than the posterior, must be thicker than the posterior in order that "the pressure of urine in the bladder may be balanced by the same tension of each muscular fibre." If, however, we carefully inspect the hypertrophied anterior wall more closely, we shall see that its composition does not conform with the law just enunciated. There are two main muscular strata—the circular and the longitudinal. Which has the greater curvature? The longitudinal. According to Dr. Pitt's explanation the longitudinal layer should be the thicker. But this is not so. If we examine any frozen section, we shall see that it is the *circular* stratum which has so greatly hypertrophied, and that it is often twice as thick as the longitudinal. I remain, Sirs, yours truly,

George-street, Hanover-square, Feb. 12th. E. HURRY FENWICK.

SIR HENRY THOMPSON has just been elected "un Membre Associé" of the Société de Chirurgie de Paris, having for some years been a corresponding member.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 19, 1887.

THE General Medical Council has again returned to its labours, and this time strengthened by those of its members who represent the great body of the profession throughout the three kingdoms. Its President (Sir HENRY ACLAND) inaugurated the session by the delivery of an address on the work of the Council, past and present. His discourse, not unnaturally, included a brief summary of the progress in medical and surgical knowledge since Queen VICTORIA came to the throne, and here he was able to show that a notable advance had been made. In his account of the progress of legislation in respect of medical education and examination, he had no alternative but to tell the story of numberless failures, of prolonged delays, and finally of but partial success. The blame cannot rest upon Parliament, for, as Sir HENRY ACLAND stated, the two great political parties have faithfully striven to do their best. The troubles have been created by the profession itself, or, rather, by those corporate bodies which have for years been held to represent its views. In the rivalry and the jealousy which they have shown towards each other is to be found the cause of the difficulties which have prevented medicine taking her proper place in this country.

We would gladly have seen Sir HENRY ACLAND lay greater stress on that great political change which enables the profession to be directly represented on the General Medical Council, and which recognises that there are rights and privileges to be guarded which are greater than those which have been held in view by the bodies whose representatives have heretofore determined all questions relating to the welfare of the profession and of the public. No doubt, as the President pointed out, the Council was already too large for the performance of effectual work; but so long as the system of representation is maintained this obstacle is insuperable. We believe, however, that the additions which have lately been made to its number will be found of value, if not in accelerating the work it has before it, at any rate in bringing it into more immediate relation with the majority of those who are actively engaged in curing disease.

The first important decision at which the Council has arrived will undoubtedly give almost universal satisfaction, and will raise the hope that the corporate bodies will not be deterred by a mistaken vanity from adopting a course which is urgently needed in the public interest. The decision was taken, upon a motion by Dr. STRUTHERS, that the Council should request the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland to reconsider their scheme of amalgamation, in the strong hope that they may be able to arrange with the Apothecaries' Hall of Ireland a scheme which shall include the Apothecaries' Hall with the two Colleges. The admirable argument of Dr. STRUTHERS was practically unanswerable, and was obviously accepted in this light by the great body of the Council. The unfortunate results which would follow from the existence of separate licensing bodies if the Colleges persisted in their refusal to allow the Apothecaries' Hall to unite with them were amply dwelt upon by the speaker, and he further showed that the Council had itself, in a communication addressed to the military authorities, expressed their opinion that the licentiates of the Apothecaries Society in Dublin are, as apothecaries, entitled to practise medicine in Great Britain and Ireland. Of the twelve speakers who followed Dr. STRUTHERS, not one could be said to adduce any substantial argument against his proposal. The College of Surgeons themselves were in favour of the amalgamation; it was only the College of Physicians that held aloof, and Dr. AQUILLA SMITH appears to have contented himself with statements to the effect that the College he represented disapproved of the proposed union. The only pertinent objection to the adoption of the resolution came from Mr. BRUDENELL CARTER, who, while fully sympathising with Dr. STRUTHERS' views, was unwilling to see the Council exceed its statutory powers, and recommend the adoption of a course which it was unable to enforce. Eventually the motion was adopted by a large majority, and it remains for the Irish Colleges to determine the final issue.

It is sincerely to be hoped the Colleges will take advantage of this further opportunity for the reconsideration of the question, and that they will learn from the decision of the Council that the Apothecaries' Hall are not likely to apply in vain for the appointment of assistant examiners should it be necessary for them to make such application to the Council. We would hope, further, that the English Colleges will learn, from the events of this week, that it would be well for them to regard as assured the appointment of the London Society of Apothecaries as an independent examining body should they continue to refuse to allow its union with themselves. Sir DYCE DUCKWORTH announced his ability to show that the controversy in England was not altogether comparable with that in Ireland. That there are some differences in detail we are prepared to admit; but the broad principles are the same, and will afford sufficient reason for the Council to arrive at a similar conclusion when the subject comes under their consideration. The only hope that can be entertained is that a golden bridge may yet be found by which opportunity may be given for the Colleges to retrace their steps. Dr. GLOVER forcibly showed that the desire to preserve the existence of the Apothecaries' Societies as examining bodies did not emanate from the Council, but was given by law, and that the duty which devolved upon the Council was to carry that law into effect. Of the intention of the Legislature on this point there can, indeed, be no doubt; and we would protest against "the battle of the shops," to which Sir HENRY ACLAND referred in his address, being further continued to the detriment of the profession.

The many reasons which exist for the adoption of the principle of unity have been so fully discussed in these columns that it is needless now to consider them further. If the corporations had been less desirous of their own welfare than that of the profession, there would be less urgency for the demand for a reconstitution of their governing bodies. But this demand has now been made, and will

receive fresh impetus if, in the face of the recent decision of the General Medical Council, the English and Irish Colleges refuse to modify their policy.

LAST week we referred in general terms to the subject of the influence of small-pox hospitals in London, to which so prominent a place is given in Dr. BUCHANAN'S last report to the Local Government Board on the proceedings of his department. It is sincerely to be hoped that this report will lead to some final decision as to the attitude of the Government towards metropolitan small-pox hospitals, and since the material which is so ably put together in it on the subject cannot fail to exert an important influence on medical and public opinion, we now recur to the matter in some detail.

The immediate cause of this report was the receipt from Mr. W. H. POWER of a further account of the influence of Fulham Hospital down to the end of 1884-85, that account showing once more that the use of that hospital for the reception of small-pox cases at times when that disease was about to assume epidemic proportions led to an excess of small-pox around the hospital, that excess being graduated according to the proximity of the houses to the institution. And this repeated experience is the more important because it has taken place in the face of every effort to remove the conditions by which infection might be spread along lines of communication between those inside and those outside the hospital. In spite of every possible restriction, the fact remains that houses within half a mile of the hospital have been attacked at three times the rate of those between half a mile and a mile of it, and at nearly four times the rate of the parts beyond. If Fulham stood alone, it might be possible, even in the face of the overwhelming statistical evidence which has been repeated year after year, to express some doubt as to whether this fatal influence was a necessary result of these London small-pox aggregations; but similar evidence as to the effect of the other metropolitan small-pox hospitals has, during recent years, been flowing in apace, whether it come from Deptford, Stockwell, Homerton, or Hampstead, or, again, from Highgate or West Ham. As Dr. BUCHANAN points out, metropolitan and registration districts exhibit a change of rank, *qua* small-pox, when a small-pox hospital is established in them, this change of rank varying, again, according as the hospital is used or not. Thus Hackney and Camberwell, which for twenty years stood high in rank in regard to the freedom of their inhabitants from small-pox deaths, needed but a small-pox hospital in their midst to be relegated to a place among the worst districts. The Registrar-General, in his annual summaries for 1881 and 1884, basing his argument on registration districts, tries to console the sufferers from small-pox in these special areas by telling them that though "that district which contains the small-pox hospital may be the one which derives on the whole the least benefit from it, or rather which has the benefit conferred by it counterbalanced by some small disadvantage," yet the absence of a hospital may be a greater evil by leading to a disinclination to use it. And, indeed, using for this purpose groups of registration districts, he lays it down as "probable" that those districts are worst off which neither have hospitals of their own nor make use of the hospitals outside, whereas those districts are best off which have no hospitals within their own areas, but make use of hospitals outside their borders. So, after all, those who suffer do so for the public benefit. This seems the only crumb of comfort which Dr. BRIDGES can provide in the report to which we referred last week. But unfortunately Dr. BUCHANAN'S inferences are based on the experience of definite circular areas round the hospitals themselves, whereas the Registrar-General's "probable" inferences are based on districts which, as Dr. BUCHANAN shows, have no fixed relation to hospital areas, and as such should not for a moment be compared with Mr. POWER'S areas.

But, leaving these special areas, Dr. BUCHANAN next considers the small-pox death-rate all over the metropolis, and he compares this with that prevailing in the provinces. Both in London and in the provinces generally there have been improvements in vaccination, and in both the small-pox mortality amongst children has in consequence been reduced below any former experience. But in the provinces the general small-pox death-rate has also been greatly reduced since the European epidemic of 1871, whereas in the metropolis there has been no such reduction. In fact, although before 1871 the London small-pox death-rate "only once reached the double of the provinces, it has in the last two five-year periods been maintained at a point sixfold and sevenfold that which has affected other parts of England." Taking a long group of years, from 1850 to 1874, the mean annual small-pox rate per million would be some 380 in the metropolis and 225 for the provinces; for the period 1875-84 it has been 268 in the metropolis and only 41 in the provinces. Some "new factor has plainly come into operation." Indeed, this changed attitude of London towards the provinces dates from the time when London, and not the country, became plentifully supplied with hospitals for small-pox, which, when in use, have again and again caused an excess of disease about them, this excess having amounted to a threefold incidence of small-pox upon the three nearest square miles as compared with its incidence on the remainder of the circumjacent districts.

The Royal Commission on Small-pox and Fever Hospitals believed that thirty or forty acute cases of small-pox might safely be treated in each of the metropolitan small-pox hospitals. Mr. POWER has shown conclusively that the evil influence of these hospitals can be, and has been, exerted with a much smaller number of cases, and it is obviously this influence which is largely contributing to maintain small-pox as an endemic disease in our midst, whilst it is disappearing elsewhere.

The closing paragraph of that portion of the report which deals with this subject of the diffusion of small-pox urges action on the part of the Metropolitan Asylums Board towards reducing the chance of spreading infection, such as was indicated by the Royal Commission. That Commission had taken into consideration Dr. BURDON SANDERSON'S scheme of a hospital so contrived that it should be artificially ventilated, and that its air should, after passing through the hospital, be subjected to a high temperature for the purpose of destroying its dangerous qualities before it was discharged and they distinctly place amongst their "practical recom-

mendations" one which advocates the adoption of this system, which they "fully believe" might be devised. But as yet nothing has been done in this direction. Surely here is a line of action which is plainly indicated, and we trust that all who have influence with the Asylums Board will press its adoption on them, for the only other alternative seems to be the entire abandonment of small-pox hospitals, at least in populous districts.

CREMATION is rapidly making its way in some civilised communities. Sensational objection to it is subsiding, and the gentler part of the creation, to whom not long since it was most objectionable, has, so to speak, come round to it with such effect that at a meeting of the Ladies Somerville Club, held a year or two ago, with one of the representatives of medicine in the chair, a resolution in favour of cremation was carried by a large majority. For many and sufficiently valid reasons we have been most careful in these columns not to favour cremation until we could see how it might be carried out, *cito, tuto,* and like the Latin poet, have felt our anxiety, "*tuta timens,*' to the extent of fearing safety. For this there was abundant cause in one danger alone—namely, that men inclined to commit murder might find in the crematorium the easiest concealment of their guilt. At the same time we never doubted the value of cremation as a sanitary measure, and now that some of the more serious difficulties surrounding it are passing away, we are open to all fair discussion of its progress. In New South Wales the practice is gaining favour so freely that a Public Bill authorising cremation passed through the Legislative Chamber on August 5th for presentation to the Legislative Assembly, and has probably by this time become the law of the land. This Act is called the Cremation Act, 1886, and in its construction the word "crematorium" means a place furnished with apparatus in accordance with the provisions of the Act for the purpose of reducing the human body after death to its mineral constituents. Subject to the provisions of the Act, any person may establish a crematorium provided the site and place be approved by the Board of Health constituted under the authority of the Infectious Diseases Superintendent Act of 1881; but a licence must be obtained by the constructor, and be signed by the Governor with the advice of the Executive Council, and the burning of the dead body of any human being in a place that is not licensed is declared illegal. It is further rendered illegal to burn a dead body except under one of the following three conditions: (*a*) The receipt by the registrar of a certificate from some legally qualified medical practitioner, stating that such practitioner has been in professional attendance on the deceased for at least four days immediately prior to the day of death, and that the deceased died from natural causes; (*b*) a certificate of a legally qualified practitioner, after a post-mortem examination, that the deceased died from natural causes; and (*c*) a certificate from a coroner or justice of the peace who has held an inquest or inquiry as to the cause of death, conveying to the registrar that such cause has been inquired into and that no further examination is necessary. Some further rules of a more stringent kind are added relating to the responsibility of all who are concerned in carrying out a cremation. The registrar who improperly issues a "cremation permit" may be subjected to a fine not exceeding £500, or imprisonment for any term not exceeding two years. The relatives of a deceased person, such as a widow or next of kin, may prevent a cremation, unless the deceased has left an attested memorandum directing that his body shall be cremated, when it is the duty of the executor or administrator to see that the direction is duly carried out if there be a licensed crematorium within twenty miles of the place where the death occurred. As a protection against crime, there is a clause to prevent persons from giving, or joining in giving, certificates for cremation after the death of anyone in whom the said person has an interest or expectancy. There is also a clause by which the Governor, acting on the advice of his Council, may suspend cremation for sanitary reasons in the event of a great epidemic if the suspension be considered advisable; and there is another clause enabling the Minister of Justice to forbid cremation under certain circumstances. There are some other minor provisions in this Act which are important for local reasons, but which may be passed over here. We have presented the leading principles of the measure, and we are bound to admit that they are as sound as they are vigorous and effective. The provision which makes it impossible for anyone who has an interest or expectancy in a deceased person to obtain a "cremation permit" removes the one great objection, which we have always enforced, more efficiently than any other plan that has hitherto been proposed, and seeing that cremation is apparently already recognised by the law of England, we should be glad to see an Act passed in this country on the same lines; for it seems to be proved by recent cremations that there is no real obstacle to cremation in England in the present state of the law, and there was no real obstacle in New South Wales. But, with much common sense, our colonial brethren have preferred to proceed in this matter by virtue of an affirmative rather than a negative law, and they are unquestionably in accord with the spirit of the times in carrying out this principle. They have, in short made the law on a great sanitary question intelligible and fresh, so that everyone can understand it and act upon it. We must not conclude this article without claiming for the profession of medicine in the Antipodes considerable credit for the part it has played in the matter of cremation legislation. To one of our medical *confrères* in Sydney, the Honourable JOHN MILDRED CREED, who, in a speech exceedingly able and exhaustive, moved the second reading of the Bill in the Legislative Council of New South Wales, a tribute is due for the success which so far has been achieved towards bringing cremation into a legal and safe practice on the other side of the globe.

THE Presidential Address of the Rev. Dr. DALLINGER, F.R.S., who has had the distinguished honour paid to him of being for the fourth time elected President of the Royal Microscopical Society, possesses more than usual interest, for it treats of a series of experiments which he has conducted for nearly seven years without intermission, having for their object the determination of the extent of change of temperature to which the lower forms of organisms can be adapted by slow modifications. The problem which Dr. DALLINGER set himself to solve was first investigated

in placing various species of monads in a medium, the temperature of which, by an ingenious arrangement devised by Professor SCHÄFER, could be gradually altered at the will of the operator. The mechanism worked so well that the variations in temperature in the course of twenty-four hours were less than one-sixth of a degree Fahrenheit. Commencing at the normal temperature of 60° F., the first four months were occupied in raising the temperature 10° without altering the life history. When the temperature of 73° was reached, an adverse influence appeared to be exerted on the vitality and productiveness of the organisms. The heat being left constant for two months, they regained their full vigour, and, by very gradual stages of increase, 78° was reached in five months more. Again a long pause was necessary, and during the period of adaptation a marked development of vacuoles was noticed, which again disappeared when it was possible to raise the temperature still higher. The further history of the experiments presented practically the same features—long pauses, vacuolation, slow advance,—until at last the high temperature of 158° was reached, when the research was accidentally terminated.

It need hardly be said that great care, skill, and patience are required to conduct experiments extending over so long a period, but the interest attached to them is fully proportionate to the time and labour expended upon them. The capability of organisms to adapt themselves to their environment has hitherto been a postulate rather than a proved fact on the part of HERBERT SPENCER and DARWIN, and much still remains to be shown in regard to the influence such changes effect in the structure and composition of the body; but it must be acknowledged to be a striking fact that organisms which normally live and multiply at 65° F. and are killed at 140° F. should by gradual adaptation become capable of living at 158°, whilst on their return to their original temperature they die. The slowness with which cosmical changes of temperature occur, and the possibility that living organisms are capable of gradually adapting themselves to such changes, was not overlooked by DARWIN, but the difficulty that confronted him, with other naturalists, was the number of generations required to be investigated before any conclusions could be drawn in regard to the effects of change of temperature on the race under observation. Dr. DALLINGER has overcome this difficulty. The monads he examined incessantly multiply by division, the longest interval being four minutes. He must, therefore, have observed something approaching half a million generations of the organisms under consideration. This is not far short of the "countless generations" required, and it is surely a matter of great interest to find that at the close of the series the organisms are found to have undergone such modification either in their composition, structure, or functions, as to enable them to flourish under circumstances that at first proved fatal.

IT is proposed to form an Anatomical Society, which shall meet about four times a year for reading papers, and discussing subjects bearing directly, on Human Anatomy, Embryology, &c. The first meeting will probably take place in April.

Annotations.

"Ne quid nimis."

DEGREES FOR LONDON STUDENTS.

THE various methods which have been suggested for procuring degrees for London students have practically resolved themselves into two—viz., the professional as advanced by the Royal Colleges, and the academical as put forward in the programme of the promoters of a Teaching University. The authorities of the existing University are too much bound to the examination-groove and standard which they have inherited from its founders to be expected to make any but minor changes in their regulations, and Convocation (which must be consulted in respect of a new Charter) is too jealous of the teaching influence to allow any new step of importance to be taken, even if the Senate were inclined to take such an initiative. The Colleges are steadily pressing forward their movement, and will soon be in a position to make application to the Crown for permission to grant degrees under their joint authority and regulation. We are sorry, however, to have to again urge the Association for Promoting a Teaching University in London to put forward its views quickly and in some authoritative manner. It is evidently at the crisis of its existence. The small attendance of members at its general meeting shows that its protracted deliberations, conferences, and waitings on other bodies have wearied many of its members, and a large secession of others may be expected if something earnest be not soon undertaken. The teachers in the Arts and Science Faculties of University and King's Colleges, who constitute the largest proportion by far of the Association and its executive committee, must agree at once on some combined line of action, if they wish to be credited with any real desire to form the academic side of a new university, and to shape the movement in that direction. The Colleges will apply to govern the professional faculty, and it will be entirely due to the supineness of the teachers in the literary and scientific chairs of London if the basis of the movement is not made sufficiently wide to embrace them also. The Colleges have a well-defined claim and a definite aim in view; the Association seems at present merely a collection of well-intentioned gentlemen with a far-reaching ideal of some great university before it; but the ideal does not yet appear to present itself to all the members in the same light. This want of agreement will merely lead to obstruction towards the Colleges, and be no gain in any other line. It is imperative, therefore, that the Association should take some tangible step at once or quietly dissolve. The teachers at the Bristol School of Medicine are alive to the necessity of prompt action, and will either oppose or assist the Colleges, according to whether residence in London be made imperative in the schemes, or whether the provincial schools, not affiliated to a university, be included in the application. At present, the report of the delegates leaves this to the discretion of the future managing body.

MILK EPIDEMIC OF TYPHOID AT YORK.

THE epidemic of typhoid fever in York, the prevalence of which we recorded a short time since, has been made the subject of a very elaborate report by Mr. S. W. North, medical officer of health to the city. York has a system of compulsory notification of infectious diseases, and under it 243 cases of typhoid fever were reported during 1886, 29 terminating fatally. Of these 243 cases, 210 came under notice during the last four months of the year, and the great incidence of the disease was in the Micklegate district, where, subsequently to Oct. 16th, no less than 119 cases occurred. In this district there are three dairies, each of which was, before the outbreak, in the habit of receiving

milk from a dairy-farm at Osbaldwick. One of these dairies had used no other milk than the Osbaldwick supply; another mixed the supplies; and a third, the Cleveland Dairy Company, kept their several sources, as a rule, distinct. Considerable suspicion attached to this Osbaldwick milk, and hence Mr. North visited it. He found that the owner had been ill with some fever, and that his wife was then in bed with a similar disease; and he gives it as his opinion that the whole family had suffered from typhoid fever. The symptoms described are not sufficiently detailed to convey a decided opinion on the subject, but Mr. North's conclusion was doubtless founded on sufficient data. The dairy pump was found to have a privy on one side, and an open ashpit on the other, together with other conditions that ought never to prevail at a dairy-farm. The analysis of the well water did not prove much, but since typhoid excreta can be purposely mingled with water without causing special suspicion on the part of the chemist, this goes for little. But the slops and excrement from the house had gone into the ashpit or privy, or on to a slop stone near the pump, and it is added that "the arrangements of the premises and the habits of the people are such as to render any mode of contamination possible." The whole course of this milk through the tradesmen taking it and on to the public is discussed at length, and, by way of additional danger, it was found that, as a result doubtless of the use of the infected milk, there were on the Cleveland Dairy Company's premises two unreported cases of typhoid fever, and this whilst the manager was passing from the sick room of his children to distribute the milk to his men and to the shops. Between October 16th and December 18th a total of 168 cases were reported, and of these 111 are proved to have used the suspected milk. An inspector having secured a sample of this Osbaldwick milk, it was stated to contain 10 per cent. at least of added water. And taking the three dairies distributing this milk, whether alone or mingled with other milk, it was found that 42·4, 38·5, and 21·7 per cent. respectively of their customers were ill with typhoid fever. In confirmation of this view as to milk infection, cases are cited showing how the disease picked out of families, not otherwise exposed to the infection through the use of milk, single individuals who had used it; and in one charitable institution, where only one out of forty-seven took the fever, the single case was that of the only child who had milk in an uncooked form. But all the typhoid fever in York has not been due to infected milk. It will be remembered how serious an epidemic took place in the autumn of 1884, and from what Mr. North says it is clear that, notwithstanding the severe lessons which the city has had, it still remains a town specially adapted to favour the spread of such an infection when once received into it. It is essentially a midden town, several hundreds of these structures having more than one privy in connexion with them, and their cleansing is greatly neglected, such work being mainly done at the discretion of the inhabitants. Then, again, the sewers are largely liable to deposit, and only under special circumstances and in limited areas are they either flushed or ventilated; they are also blocked by back-water in flood times. The street gullies and old sewers also admit of leakage of contents. Such an array of conditions favourable to enteric fever may well account for the fact that the disease is endemic in the city. But it is unfortunately supplemented by the suspicious circumstances attaching to its water-supply. Mr. North does not credit it with any share in spreading this epidemic, but its use involves, as we pointed out last week, a dangerous experiment on human lives. We hope that we may soon be able to report some substantial progress towards removing the dangerous conditions to which we have adverted, and which Mr. North has more than once brought prominently before the Town Council.

THE VOLUNTEER MEDICAL SERVICE IN PEACE AND WAR.

DR. W. P. MEARS has just been lecturing at Newcastle-on-Tyne on the Volunteer Medical Service, and his lectures have created much interest there. He shows that the Medical Department is almost in the same condition as it was in 1859. One surgeon only is carried on the establishment of each corps, however large it may be, even where, as in Edinburgh and Cardiff, there is an administrative battalion of 2000 men. The surgeon, Dr. Mears points out, has no duties laid down for him beyond attendance at ranges and in camp. He is not responsible in any way for the physical fitness of recruits, the sanitation of drill-sheds or corps buildings, for the sites and surroundings, the food, water-supply, or drainage of camps. His interference in such matters, unless asked for courtesy sake, might not improperly be considered impertinence, and his presence (personal considerations of course aside), except in an ornamental capacity, is apt to be thought of as a necessary inconvenience. He has nothing to do, does not know where to go, gets in everybody's way, and, as Dr. Mears points out very forcibly, is thus more likely to prefer the social to the military duties of volunteering. He is not even required to pass an examination, and his optional examination is more or less a form. Until last year he could not, like other officers, go to a school of instruction where alone he could learn anything of military medical work, and permission was granted him last year only on condition of paying his own expenses. That condition, we are glad to say, has just been removed. Dr. Mears, in his excellent lectures, fully points out the anomalous and indifferent state of the present Volunteer Regimental Medical Service, of which he is himself an active and enthusiastic member, and he makes some valuable and practical suggestions for its reform, which should have more than a local effect. We are pleased to see that he believes that the present unsatisfactory state of things is due to want of knowledge of medical requirements on the part of combatant officers, and not to want of good-will. In this view we entirely concur with Dr. Mears, and that much good might be done if the subject could be similarly brought forward in other Volunteer centres.

INDICATIONS FOR THE USE OF NITRO-GLYCERINE.

DR. TRUSSEWITSCH, in an instructive paper on the use of nitro-glycerine published in the *St. Petersburger Medicinische Wochenschrift*, points out that the value of this drug in various affections—angina pectoris, migraine, and neuralgia (which he describes as angioneuroses), as also in sea-sickness, some forms of anæmia, faintness, palpitation, and other diseases—depends upon the existence of an irregular distribution of blood, which condition may be inferred from a certain degree of pallor of the skin, especially of the face, often coexistent with a weak pulse and a small rigid radial artery, which frequently is situated at some depth. When, on the other hand, headache and neuralgia occur in patients with chronic congestion of the subcutaneous veins of the face, nitro-glycerine is to be avoided; and similarly it is of no use in asthma, when the face is reddened in consequence of emphysema. If, however, a pale face exists with angina pectoris, migraine, giddiness, shock, toothache, or sea-sickness, the best results may be looked for by giving nitro-glycerine. The regulating effect of the drug exercises an influence over the congestion of internal organs similar to that brought about by bloodletting; and in these congestions, whether of lung, brain, or kidney, when they are of a temporary character, the pulse is generally found to be slow and of low tension—a fact which, as the author remarks, is sufficiently well known in reference to the fever-free periods of acute

hyperæmia of the lung and kidney. Dr. Trussewitsch lays down as a rule that the condition of the pulse is the best indication for the employment of nitro-glycerine, and the most trustworthy guide as to the dose with which to commence the treatment. The smaller the radial artery is, the more rapidly it dilates under the action of the drug, and the less the secondary effects proceed; on the other hand, the fuller the pulse with a distended radial artery, the less it is affected; and finally, the softer the artery, with a weak pulse, the greater the secondary, and the less the general, effects. Single-drop doses of the 1 per cent. solution are sufficient in cases of small pulse, but with a full pulse it will be found that the full effects cannot be produced with less than two-drop doses. When there is a soft artery with a weak pulse, subnormal doses only should be given—a quarter to half a drop. After the trial dose is given, the patient's sensations of pulsation and pain in the head, as well as the distension of the radial artery under the finger of the physician, will be the guides for increasing the dose. The author finds that the best modes of administering nitro-glycerine are the simple dropping of the solution on the tongue, and by means of tablets; much less satisfactory results were obtained when given mixed with water.

THE BIRKENHEAD AMPUTATION CASE.

ON Jan. 28th an inquest was held at Birkenhead by Mr. Churton, coroner, touching the death of Mary Murray, fifty-four years of age. The facts of the case were very simple. The deceased was subject to fits. On Jan. 5th she was found lying on the floor, with a shawl which she had round her neck on fire. Whilst she was an in-patient at the Borough Hospital gangrene of the foot and leg set in. The mortification spread so rapidly that it became necessary, in order to save the woman's life, to amputate the limb without delay. A messenger was sent to the husband to seek his consent to the operation, but on its being found that an answer could not be obtained for three hours, the staff of the hospital decided not to wait but to amputate at once. This was accordingly done. At the inquest the husband of deceased complained that he received no intimation that an operation would have to be performed, and one of the jurors considered "that great laxity existed on the part of the doctors in not consulting the deceased's relatives with regard to the operation to be performed." It might possibly be contended that legally an assault had been committed upon the deceased in that her leg had been amputated without the husband's consent; but such a charge would fall to the ground inasmuch as the woman was taken to the hospital to be treated for her injuries, and that, too, without any limitation or definition of the kind and extent of such treatment. Had it not been for the burns we doubt if the gangrene would have set in; and as, therefore, on this assumption the burns constituted the *causa causans* of the death, we maintain that the authorities were within their rights in doing whatever they deemed necessary to relieve suffering and to save life. Yet there is a general understanding that where any serious operation, as one perilous to life or involving mutilation of the body, becomes necessary or advisable, the immediate relatives of the patient shall, if possible, be made aware of its intended performance. Now, considering the extremely rapid course of the gangrene in this case, we are of opinion that had the Birkenhead surgeons waited for three hours they would have been guilty of dereliction of duty; for their first duty was to ward off impending death, and how could they be said to be doing so if they allowed the disease to progress for hours merely because they had not obtained the husband's sanction for amputation to be performed? It is just to suppose that so serious an operation was not anticipated by the surgeon in charge, or he would have got provisional permission for its performance. In a still more recent case within our knowledge the husband refused to allow the gangrenous limb of his wife to be removed. Such refusal, we imagine, would make one answerable for being a party to acceleration of the death, in the same way that the "Peculiar People" are amenable to the law for neglecting to call in medical aid where it is by professional and common consent avowedly necessary. The coroner complained of the house-surgeon not giving notice of the death, but the latter gentleman replied that, believing death to have been due to natural causes, he did not think such notice necessary. We cannot help thinking, however, that where any kind of violence has been sustained shortly before death, it is well to give the coroner an opportunity of holding an inquisition if he deems it advisable, even if the medical man who attended deceased believes that the injury had nothing to do with causing the death. Where a patient, fifty-four years of age, sustains burns and is subsequently attacked by gangrene of the leg, it may be very difficult to say with certainty that the gangrene arose independently of the burns.

CATHETERISM OF THE AIR PASSAGES.

THE introduction of a catheter into the larger air passages, for the purpose of local medication or mechanical dilatation, or to obviate recourse to tracheotomy, has been much facilitated since the introduction of cocaine into laryngeal surgery. A paper recently read before the Medical Society of the Charité Hospital at Berlin by Dr. Landgraf, clinical assistant (*Berl. Klin. Woch.*, 1887, No. 5.), illustrates the ease with which the procedure is effected. He described a case presenting symptoms of stenosis of the left bronchus; the symptoms, which had gradually increased in severity, dating over two years. When admitted into the hospital last July, the patient was liable to dyspnœal attacks; and physical examination led to the above diagnosis. The constriction was at first thought to be due to compression, a view which was borne out by the presence of a small area of dulness over the manubrium sterni and to its right. There was no evidence that this was due to a tumour arising in the bronchial glands. The long duration of symptoms negatived the existence of a malignant tumour, and the absence of bacilli in the sputum set aside the notion of tubercular disease. Aortic aneurysm was more probable; but this diagnosis lacked confirmation, the only positive sign being the area of dulness. It was therefore thought to lie between syphilitic stricture (the patient had contracted syphilis twelve years previously) and aneurysm; and, since the former gave a more hopeful prognosis, the patient was placed under anti-syphilitic treatment. But the dyspnœal attacks increased in frequency, and measurement of the chest showed a diminishing capacity of the lungs. Further, an examination made at the beginning of October revealed what was thought to be a membrane deep down in the trachea. This appearance supporting the endo-bronchial character of the stenosis, it was resolved to resort to catheterism. The larynx was anæsthetised by a 20 per cent. solution of cocaine, and a 10 per cent. solution was injected into the trachea. The catheter was easily passed to a distance of 28·5 centimetres from the teeth (found subsequently to correspond to the tracheal bifurcation) without meeting any constriction. The catheterism was repeated at intervals, and on several occasions to a depth of 35 centimetres, with a view to traverse the left bronchus. The measure produced so much relief that at the end of the month the patient was well enough to leave the hospital. Unfortunately the diagnosis of stricture, which had been apparently confirmed by the relief of the symptoms, proved incorrect; for in a few weeks he returned, having had a severe asphyxial seizure, and shortly after died. The

cause of the stenosis proved to be—what is by far the most common cause of such a condition—an aneurysm of the aorta, which compressed the left bronchus. The condition which was mistaken during life for a membrane was an anæmic part of the right wall of the trachea. Although during life some irregularities in the mobility of the vocal cords were observed—on one occasion the right cord moving less on respiration and phonation, and on another the left cord appearing immobile in middle line,—yet the dyspnœal attacks could not be referred to involvment of the vagus. They must have been due to the compression of the bronchus, for they disappeared directly the narrowing produced by that compression was mechanically relieved. Dr. Landgraf fully recognised the danger of resorting to such mechanical dilatation in aneurysmal cases, and he would hesitate to catheterise in any case in which aneurysm could be suspected. Nor is it quite easy to account for the great relief temporarily afforded by the measure in this case. The valuable point learnt from it is the ease with which the air passages can be catheterised with the aid of cocaine, thus affording means to relieve strictures, as well as to apply remedies locally to ulcerated surfaces on the respiratory tract.

"VENT—NOT VENTILATION."

IT is encouraging to find that the particular, if not peculiar, views of the sewer-air and drain-ventilation question, which have for many years past been put forth in these columns, are at length becoming popular—at least, so far popular that a leading sanitarian is pleased to adopt and enforce them. In his lecture on "The Laws of Nature in relation to Health," recently delivered before the Hertfordshire Natural History Society, Professor Attfield, F.R.S., denounces the absurdity of ventilating at a low level close drains, and shows clearly enough what ought to be evident to every common-sense observer—namely, that (1) directly in proportion as we make "openings" at a low level for the escape of air from sewers do we return to the open ditch system; and (2) that there is really no need for the ventilation of drains—it is only a vent to avoid back-pressure in the drain that is required. These two propositions should not need even to be formally stated. It goes without saying that to make in any pipe which is designed to carry away a noxious material such an opening as will admit of the escape of its contents, whether solid, fluid, or gaseous, must needs be to destroy its character as an apparatus for the removal of offensive matter. As well put an air-tube in the cover of a close-stool as ventilate a drain. Who first evolved the absurd notion that drains should, or *could with impunity*, be ventilated by openings at a low level we do not know. That there must be some sort of safety-valve for the escape of small quantities of air or gas when over-pressure occurs from back-flow or the sudden influx of storm-water cannot be doubted. If no such provision were made, the foul gas in the sewers must be forced back through the water-traps into our houses. The obvious mode of supplying the air-vents necessary is to erect pipes at suitable points reaching to high levels, and there affording a way of escape for air or gas in the drain at a safe distance from windows and chimneys. The notion of ventilating drains for the sake of ventilating them is so absurd that it can be compared to nothing but a special provision for the dissemination of pestilent gases and vapours in the atmosphere, and only the most perverse ingenuity could be supposed to intentionally and consciously propose the construction of openings into drains on the level of streets, and in the proximity of houses and thoroughfares. Professor Attfield's perspicuous and attractive mode of presenting the facts in his recent lecture is much to be commended, and we gladly welcome him as an advocate in a cause in which we are much interested.

AN OBJECTIONABLE "PLEBISCITE."

IT is greatly to be regretted that an enterprising contemporary could not, in the fertile ingenuity of its resources, discover some less objectionable subject for a prize than that which it recently proposed as a "timely plébiscite to its readers"—namely, the mention of names under the following extraordinary headings: (1) "The best doctor of all," (2) "the best ladies' doctor," (3) "the best surgeon," (4) "the best dentist," (5) "the best-managed hospital," (6) "the best watering-place for convalescence," and (7) "the best nursing establishment." "The usual prizes of £2 and £1 will be given to the two competitors whose coupons agree most nearly with the opinion of the majority." A plébiscite such as this can but be most repulsive to the feelings of the medical body as a whole, as well as of those selected. It is a grievous annoyance that practitioners should be subjected to freaks like this. The vagary to which we now direct attention is probably without its equal. "The winter," says the evening paper referred to, "is the doctor's harvest time ..... During the bitter winter months few of us escape the doctor's clutches, and there are few households in the metropolis to which he is not called." Upon this ground the plébiscite is regarded as "timely." Whether our contemporary thinks the "bitter winter months" are past and this is the time to return thanks for the blessing of a good doctor, or if he looks forward with dread to a wintry March and April, so that the opinions he proposes to elicit are likely to be presently applicable, we do not know; but it matters little to our immediate concern whether the gratitude which is to find this strange expression be for favours past or to come. Under any conditions, the scheme is a bad and offensive one, and we can only regret the adoption of a device so obviously objectionable.

THE GERMAN MEDICAL CONGRESS.

THE sixth annual German Medical Congress is announced to be held at Wiesbaden from the 13th to the 16th of April, under the presidency of Prof. Leyden, of Berlin. The following are subjects already notified: The Treatment of Phthisis, to be opened by Dr. Dettweiler (Falkenstein) and Dr. Penzoldt (Erlangen); Localisation in Cerebral Disease, by Professor Nothnagel (Vienna) and Dr. Naunyn (Königsberg); the Pathology and Treatment of Whooping-cough, by Dr. Vogel (Munich) and Dr. Hagenbach (Basle). Besides the foregoing set discussions, papers are promised on Pernicious Anæmia, by Dr. Lichtheim (Berne); on the Pathological Anatomy of Tabes Dorsalis, by Professor Rindfleisch (Wurzburg); on Experimental Epilepsy, by Dr. Unverricht (Jena); on the Physiological Import of Migrating Leucocytes from the Tonsils and Lingual Glands, and on Chyluria, by Dr. Rossbach (Jena), who will also describe a chair he has devised for aiding respiration (*Athmungsstuhl*) in cases of emphysema and asthma. The secretary of the Congress is Dr. Emil Pfeiffer, of Wiesbaden.

ON THE ETIOLOGY OF THE UTERINE SOUFFLE.

WEHMER contributes to the *Centralbl. f. Gyn.*, March 13th, 1886, an interesting case in which the seat of origin of the ordinary form of uterine souffle could be clearly and experimentally demonstrated. A. Z——, multipara, pregnant nine months; abdomen very pendulous. The recti muscles were so widely separated as to leave below the umbilicus an interval of twenty centimetres (eight inches) between one another. In this interval the abdominal walls were extremely thin and translucent, so much so that through them a large pulsating bloodvessel could be seen on the left side running in the uterine wall and followed for a distance of ten centimetres (four inches). On auscultating this vessel, a distinct

whizzing bruit was audible synchronous with the maternal pulse, and the movements of the arterial wall could be readily felt with the finger. Pressure with the stethoscope or the finger completely silenced the bruit. Anæsthesia also brought it to a standstill, owing probably to the coexisting fall of intra-abdominal pressure; the bruit returned when the woman regained consciousness. During the labour-pains the note of the souffle reached a higher pitch and became musical. After delivery it continued audible for two days with diminishing distinctness. Wehmer believes this to be the first case in which the seat of origin and the various circumstances affecting the souffle have been so capable of demonstration, and here they were so owing to the existence of an unusually large branch of the uterine artery.

INFANT MORTALITY AT WORKINGTON.

THE *Times* comments on the "remarkable report" of the medical officer of health of Workington, in Cumberland, and quotes the comments it contains on the extraordinary infantile death-rate, which is stated to have amounted in 1886 to 136·2 children under one year of age per 1000 registered births. This mortality is regarded by Mr. Lowe as due to a series of causes, and notably to tea-drinking, patent medicines of a "soothing" type, and to the neglect of children whilst their mothers are engaged at meetings of the Salvation and the Church Armies. The statements which the report contains as to scarlet fever, and the threat of resignation which Mr. Lowe commits himself to because he will not be a party to "wilful murder" if his advice as to school-closing should be disregarded, probably have reference to a fatality amongst children at the school age and not to young infants. The School Board, he alleges, "prefer to save money at the expense of human life," a statement which we assume, relates to the frequently experienced desire of School Boards to look with disfavour on anything which lessens the school attendance, and so interferes with the Government grant. But as to children under one year of age, we think Mr. Lowe bases his scathing condemnation of Workington on insufficient data, for at Workington the infantile death-rate under one year—that is, 136 per 1000—fell short of that for England and Wales during the same period, and indeed during any recent period. For the whole country the corresponding rate was 150 in 1886, 147 during 1885, and 149 for the ten years 1871-80. Whilst we have no wish to detract from efforts to reduce the deaths amongst infants in Workington, we feel bound to point out that the rate there experienced is by no means extraordinary. If Mr. Lowe had turned his attention to the 178 per 1000 rate in the twenty-seven provincial towns quoted by the Registrar-General, or to the 200 to 250 rate in some selected towns, we could have better understood the terms of his report.

BORACIC ACID AS A PRESERVATIVE OF FISH.

THE preservation of fish, and especially herrings, by boracic acid is a matter of considerable economic importance, and one which cannot fail to have an interest from a medical and hygienic point of view. The subject naturally divides itself into two distinct departments—the influence of the preserving agent on the fish, and the effect of fish so preserved on the human economy. As often happens in questions of the kind, accurate scientific data are not available for the discussion; so that we have to trust to *a priori* reasoning and to common sense. That boracic acid cannot improve the quality of the tissues of the herring as a food goes without saying, and we have the actual evidence of the senses to prove that its savour and appetising qualities are deteriorated by this method of preservation. That the acid used efficiently and in sufficient quantities will prevent septic decomposition may be granted, but this is hardly all that is required of a preservative of fish. From long experience we have learnt that preservation by common salt and by wood smoking is not deleterious, but we have yet to learn whether fish can with impunity be kept in boracic acid for a long period of time. However, in the absence of accurate experimental data, it is impossible to assert positively that minute doses of boracic acid can prove deleterious to the healthy action of any or all of the organs of the body, though the inference may fairly be drawn that the use of the drug can neither be truly preservative of all the qualities of fresh fish nor altogether innocuous to the physical welfare of man.

SCIENTIFIC TERMS.

IT has sometimes been questioned whether the use of Latin or Latinised Greek as the language of scientific nomenclature is not open to the accusation of pedantry. Some would prefer a system like the German, which to a large extent employs, besides the usual classical expressions, a set of names belonging to the native tongue. This plan has no doubt some value with a view to popular instruction; apart from this consideration it is needless and cumbersome. On the other hand, the revival of the dead languages for the same purpose has distinct advantages. Possessing a vocabulary copious, definite, and familiar to educated persons, they afford to all such the easiest means of arriving at a common understanding as to scientific facts. It cannot be denied, however, that the wish for precision does sometimes lead to wordiness. Natural history, botany, medicine even, but above all organic chemistry, can show instances in which a term has so excelled in lengthy conciseness of learned description that its fitness for general use is absolutely gone. Such terms in combination would almost constitute a new language in themselves. It is needless to say that their proper place is in purely technical records. Thus placed, they actually assist the expressions and understanding of the erudite. They have no convenient place in every-day life, and we find accordingly that as soon as they have to travel beyond the precincts of the laboratory they are superseded by terms which, if less fully descriptive, convey some definite idea in a simpler form.

THE MOSCOW MEDICAL CONGRESS.

THE second congress of Russian practitioners has just been held in Moscow (the first having taken place at St. Petersburg last year), and seems to have been a great success, the great hall of the University being crowded at the two general meetings by hundreds of medical men from all parts of Russia. It had been previously announced that the sections to which most prominence would be given would be those of Public Medicine, Pharmacology, Balneology, and Electro-therapeutics, and the Pharmacy and Pharmacognosis of Ophthalmic and Children's Diseases. General subjects were, however, by no means excluded, many burning questions connected with both medical science and medical politics being discussed. At the final general gathering, Professor V. Y. Pashutin congratulated his audience on the increased number of members whom this congress had succeeded in attracting, there being no less than 1300, whereas last year there were only about 500. The number of papers, too, was double that which was communicated to the St. Petersburg meeting, being 200 against 100 last year. Remarking on the general interest of these papers, he mentioned as particularly valuable those on the treatment of phthisis, the various operations for stone, Cæsarean section and abdominal section, Pasteur's inoculations, the need of raising the level of pharmacists' education, the possibility of admitting properly educated women to

the examination for dispensers, over-pressure in schools, the want of revision of medical legislation, the definition of the position of medical experts in legal practice, &c.

MORTALITY IN PUBLIC LYING-IN HOSPITALS OF GERMANY.

DOHRN, in *Zeitsch f. Geb. und Gyn.*, p. 121, 1886, draws attention to the great diminution in the mortality of lying-in women which has taken place in the above-mentioned establishments since the introduction of antiseptics. He selected the period of 1874-83, since in 1874 antiseptics were scarcely used anywhere, while in 1883 they had become very general. The total number of cases of labour was 104,287, and 1429 women, or 1·37 per cent., died. The vast improvement indicated by this percentage will be clear on comparison with the statistics of previous years. Thus, in 1866, Lefort found the average mortality in the lying-in hospitals to be 3·4 per cent., while Winckel in 1869 calculated the mortality on 500,000 births to be 3 per cent. Even this great improvement, however, in lying-in institutions leaves their mortality far behind that of women attended in private practice; in the latter the percentage of deaths is only ·6 to ·7 per cent. Various influences contribute in bringing about this result: 1. The large proportion of primiparæ in public lying-in hospitals, puerperal fever being, as is well known, unusually common after a first confinement. 2. The clinical instruction given in public hospitals, which is invariably accompanied by special dangers in spite of every precaution. 3. The numerous complicated cases that are sent to such establishments. 4. The fact that many women are admitted who have been examined and exposed to septic infection before admission. Dohrn further investigated the question as to how the mortality was affected by the clinical use made of various lying-in hospitals, and he found that the mortality in those in which no instruction was given was ·56 per cent.; in those where midwives were trained, 1·13 per cent.; in those where midwives and students were trained, 1·42 per cent.; in those where students were trained, 1·90 per cent. This shows, as Semmelweiss pointed out long ago, that students, who are much in contact with septic matters, are a great source of danger to lying-in women, even more so than midwives. Dohrn is of opinion that the recent decreased mortality in public maternities is solely due to the introduction of antiseptics, and that the mortality will be low in proportion to the conscientiousness with which the antiseptic system is carried out.

TREATMENT OF HÆMATOMA OF THE EAR.

DR. A. LEBRUN, in a clinical lecture published in the new Brussels journal, *La Clinique*, says that after having tried various plans for the treatment of hæmatomas of the ear, including free opening as well as Follin's method of making a number of punctures, and having found them all very unsatisfactory, he has latterly injected iodoformed ether with complete success. For this two needles are inserted into the tumour at opposite points; through the larger one, No. 3 of Dieulafoy's aspirator, the contents are drawn off, the puncture being closed by means of iodoformed collodion. Then through the remaining needle, which is that of an ordinary hypodermic syringe, from fifteen to sixty minims of a solution of iodoform in ether, of a strength varying from 2 to 10 per cent., is introduced into the cavity of the tumour. This injection causes some pain, which, however, soon passes off. No dressing is required, and a complete cure results. In one case M. Lebrun twice injected a saturated solution of iodoform in ether without evacuating the contents of the tumour. This occasioned severe and prolonged pain, an eschar of the size of a half-franc piece formed, and although this healed, the process required more than three weeks. The comparatively unsatisfactory result in this case is considered by M. Lebrun to have been due to the escape of a large part of the first injection, and to over-distension of the tumour.

ANIMAL LYMPH.

A PARAGRAPH which emanates from the Central Press has appeared in many newspapers, to the effect that the Local Government Board have issued, or are about to issue, a circular letter enjoining precautions to be taken with regard to vaccination, and recommending a more general use of calf lymph. We disbelieve the latter part of this story. The Local Government Board have recently published the report of their medical officer, Dr. Buchanan, in which he states that as Dr. Cory "has previously established an identity between calf lymph and humanised lymph in the degree of their 'insertion success' when both are used in a fresh condition, so now he shows (at all events for English practice) that there is much less difference than at one time was believed to exist between the two kinds of lymph, in respect of the degree of success obtainable from them after keeping during ordinary periods of time." Thus, calf lymph may be relied upon to produce results similar to those of humanised lymph, but it would be disastrous if the use of stored calf lymph were to replace direct arm-to-arm vaccination. The reports of the Local Government Board have amply shown that direct vaccination arm-to-arm or calf-to-arm should be performed wherever this is possible, and if direct vaccination is replaced by the use of stored lymph, as would be the case if calf lymph were "generally" used, the protection of the population against small-pox would be greatly diminished, for the results obtained by the latter process would give an insertion success of some 20 or 30 per cent. less than direct vaccination.

THE JUBILEE YEAR AND THE HOSPITAL SATURDAY FUND.

A DAILY contemporary reports a public meeting in Bethnal-green to promote the collecting of voluntary contributions in aid of the metropolitan hospitals, dispensaries, and convalescent homes. The collection is to be by boxes in all conceivable places, to be spread over fifty days, and is to take the place of the annual demonstration and collection of the East-end of London in aid of the Hospital Saturday Fund. Two-thirds of the sum raised are to be given to the Hospital Saturday Fund, and the remaining third to the Working Men's Morley Convalescent Home near Dover. This is a Jubilee movement, but is scarcely to be distinguished from the ordinary Hospital Saturday methods. We repeat what we said last week and often before, that systematic weekly payments by the working classes should be organised by the Hospital Saturday Fund.

UNQUALIFIED ASSISTANTS.

ON the subject of unqualified assistants we continue to receive communications, urging two very sharply different views. According to one set of writers, unqualified assistants are an unmitigated evil and almost an imposition on the public. According to another, they are an old institution to be retained, if not defended. We have not further space for this controversy. The general conclusion in our mind is that the day of unqualified assistants is wellnigh over. A few old members of the class are to be pitied, and some of them are even to be respected for their abilities and character. Such men will still find employment—perhaps should find employment under the immediate eye of good practitioners. But their prospects and position will be increasingly unsatisfactory. Public opinion demands that

all men who practise medicine should be qualified, and the profession feels that it is injured by the competition of unqualified assistants. All young men who are shirking their examinations and threatening to drift into the position of unqualified assistants should take warning in time. If they cannot see their way clear to gain medical qualifications, they should abandon all thoughts of medical assistantship and take to other callings.

NEURASTHENIA — NOT HYSTERIA.

MR. HOVELL returns with unabated ardour in a pamphlet before us, published by Churchill, to his favourite occupation, that of defining the conditions of neurasthenia, and combating the theory that it is represented in the term hysteria, which he would like to see abolished from medical language. He has no patience with material views of the causation of such states, whether tending to locate the material injury in the nervous or the uterine system. He complains that the effect of shock, especially moral shock, has been much overlooked in this connexion, and would have us regard neurasthenia as essentially a psychological condition in which no lesion can be detected. He claims for such patients more patience and sympathy than he thinks they receive under the old theories of their disease. He admits the cures wrought by Dr. Weir Mitchell and Dr. Playfair, though he thinks the cases of the latter physician savour more of coercion than is desirable, considering that he is dealing with patients of the feminine gender. His guiding principles of treatment are to remove all causes of irritation and to build up the strength. The one point on which all seem agreed nowadays is the existence of a veritable weakness in such cases. This should be considered and treated. It is equally undeniable that some degree of firmness in the physician is beneficial, though this should never be allowed to exceed proper limits. A third point is that the uterus has no such special culpability in these cases as has been assumed, and that the use of the term "hysteria" as involving an exploded notion should be discontinued. Possibly finer researches in pathology than have yet been realised, or are even now practicable, may show positive physical lesions in many of these cases.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE following deaths are announced:—M. Bechard, Professor of Physiology and Dean of the Faculty of Medicine of Paris; he was also permanent secretary of the Academy of Medicine. Dr. Jos. Zit, *Privat-docent* of Children's Diseases in the Bohemian Faculty of Prague. Dr. F. von Jäger, former Chief of the Medical Senate, aged seventy-three. Dr. F. Sutkovski, Professor of Surgery in Kazan. Dr. Miltiader Weligelos, Professor of Midwifery at the University of Athens.

DAMP BEDS.

A CORRESPONDENT, "Traveller," in despair of finding any means which will prevent the use of damp beds, asks us to name an antidote which will protect the sleeper so unfortunate as to occupy one. A reply in the terms he suggests is for us, we fear, impossible. His question will be better answered if we follow the guidance of common sense than by an appeal to any purely professional dictum. In so far we differ from our correspondent, that we still believe in the preventive power of care on the part of travellers and hotel-keepers. Without this, indeed, no other remedy can have much efficacy. Neglect in this particular has been followed by the most serious consequences, and there is no detail in hotel management which more deserves the attention of the directing authority, or which, if its due execution were ensured, would better repay the pains expended on it. The dampness of beds is usually in their sheets. Blankets and mattresses are not changed with every occupant, and are therefore less liable to this defect. Whenever, therefore, a traveller has reason to doubt if his bed has been duly aired, he should insist that the sheets be thoroughly warmed forthwith by hot bottles or some other mode of applying dry heat.

HERPES ASSOCIATED WITH LOCOMOTOR ATAXY.

IT is stated in *O Correio Medico*, of Lisbon, that there is now in the wards of the hospital of St. Sebastian of that city a patient suffering from locomotor ataxy, who in addition to joint affections as described by Charcot, and loosening of the teeth while quite sound, has developed herpes zoster, extending from the cervical to the lumbar region, the eruption spreading outwards in the directions of the intercostal spaces, and being accompanied by severe neuralgia and hyperæsthesia of the skin over all the region affected. A few previous cases of herpes associated with locomotor ataxy have been mentioned by Fournier, Charcot, and Buzzard, and by Portalier in his thesis (Paris, 1884). In all these, however, the herpes seems to have been developed in the pre-ataxic period. Similarly as to the falling out of the teeth which is also rare, Fournier only mentions one instance, and in this it occurred before the manifestation of ataxic symptoms. *O Correio Medico* refers to a thesis by Dr. H. Bonnieux (Paris, 1883) on this subject.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

AT the last meeting of the Society a resolution was adopted expressing approval of a scheme for amalgamation with the provincial Societies of Health Officers, as proposed by the President, Dr. Alfred Hill. A committee consisting of the president, ex-president, the treasurer, and the two honorary secretaries, was appointed to consider the details. The Council is about to report to the Society on the amendments which experience has shown to be necessary in the Public Health Act, 1875. Health officers who have found the Acts faulty in any particular should communicate at once with Dr. C. E. Saunders. This duty, it should be observed, is being undertaken by the Society of Medical Officers of Health, and not by the Epidemiological Society, as inadvertently stated in last week's issue.

BRIGADE-SURGEONS IN INDIA.

WE understand that the case of the Brigade Surgeons in India will shortly be brought before Parliament by Colonel Hughes-Hallett. We have repeatedly noticed the injustice done to officers of this grade by the denial to them of the advantages of pay and allowances which ought to attach to the rank. We trust that their claims may be so strongly pressed home upon the Government as to lead to an early redress of their grievances. Copies of the statement of these claims may be obtained by any person interested in the subject on application to Messrs. Holt, Lawrie, and Co., the Army Agents, in Whitehall-place.

THE CONTAGIOUS DISEASES ACTS.

THE Woolwich Board of Guardians was specially summoned last week to consider a letter received from the Portsea Island Union with respect to the spread of contagious disease since the suspension of the Contagious Diseases Acts, asking the Woolwich Board to appoint a deputation to co-operate with them in waiting upon the Local Government Board with a view to restoring the operation of the Acts. The chairman (the Rev. S. G. Scott, Rector of Woolwich) read a letter from the principal medical officer of the Woolwich district, in answer to a request for information which he had addressed to him. This letter gave ample evidence of the

lamentable results of the suspension of the Acts. The Board then questioned the relieving officers of the union, and they all, with a single exception, bore testimony of a similar character, as did likewise Mr. Boulter, the medical superintendent of the infirmary. One of the guardians, a local chemist, said that his "business experience" since the suspension of the Acts had furnished him with such overpowering evidence of the resulting evils, that he was now as strong an advocate for the restoration of the Acts as he had formerly been for their repeal. The Board unanimously resolved to give the co-operation asked for by the Portsea Island guardians.

HONOURS TO MEDICAL MEN.

THE Queen has been pleased to make the following, among other appointments, to the Most Eminent Order of the Indian Empire:—Sir George Christopher Molesworth Birdwood, M.D., C.S.I., Special Assistant in the Statistics and Commerce Department of the India Office, and Surgeon-General Benjamin Simpson, M.D., Sanitary Commissioner and Surgeon-General with the Government of India, to be Knights Commanders; and Thomas Beatson Christie, Esq., M.D., Medical Superintendent of the East India Asylum at Ealing, to be a Companion of the said Order. The Queen has also been graciously pleased to give directions for the following appointment to the Most Distinguished Order of St. Michael and St. George:—Surgeon Charles William Owen, C.I.E., to be an Ordinary Member of the Third Class, or Companion of the said Most Distinguished Order for services rendered on the Afghan frontier.

EXCISION OF CHANCRES.

DR. ANDRONICO claims to have entirely eradicated the syphilitic virus in four cases by excising the primary chancre. He believes that if the sore is situated in a locality such as the nymphæ or the prepuce, where excision is possible, and if the operation is performed within forty-eight hours, or at the very latest three days, from the first appearance of the chancre, success may be hoped for. The operation is, he says, contra-indicated if a longer time than this has elapsed or if the glands are enlarged.

RESPITE OF THE CONVICT THOMAS THOMPSON.

WE are glad to find that the representations we made as to the doubtful sanity of Thomas Thompson, sentenced to death at Durham for the murder of his child, have been so far confirmed by the experts to whom the question was referred that the Home Secretary has felt warranted in advising Her Majesty to respite the prisoner.

FOREIGN UNIVERSITY INTELLIGENCE.

Breslau.—The students have arranged a public presentation of thanks to Prof. Fritsch for declining an invitation to the chair of Midwifery at Leipsig.

Cracow.—Dr. Mikulicz, Professor of Surgery, who received recently an invitation to Konigsberg, at first accepted it, but subsequently withdrew his acceptance, preferring to remain in Cracow.

Dutch Universities.—The total number of medical students during the present session is 1254, Amsterdam having 462, Leyden 346, Utrecht 247, and Groningen 198.

Giessen.—Dr. H. Steinbrügge has been nominated Extraordinary Professor of Otology.

Halle.—The 14th inst. being Professor Krukenberger's 100th birthday, a grand assembly of his old pupils was held in his honour.

Italian Universities.—The total number of medical students at present is 5195. Of these, 2073 belong to Naples.

Nancy.—M. Spillmann has been selected for the chair of Clinical Medicine, and M. Alphonse Herrgott for that of Clinical Surgery.

Paris.—M. Guignard, Professor of Botany in Lyons has been appointed to replace M. Chatin in the École Supérieure de Pharmacie.

SIR HENRY THOMPSON has requested us to call attention to the unauthorised use of his name in widely circulated advertisements respecting Friedrichshall Water. He feels aggrieved, first, because he invariably refuses the use of his name to all applicants for recommendations in any form; and, secondly, because in this case he does not hold the opinion attributed to him. Nearly twenty years ago he named with approval, in a lecture at University College, the water in question—a period at which not more than two or three natural aperient waters were used in this country. Since that time several others have been imported, and he no longer endorses the original statement. The advertisers disregard this fact. There is never any clue to them in the announcements, or he would have sent an earnest protest against the practice. He has no other resource than to make one in public, and this we willingly afford him an opportunity of doing.

La Province Médicale (Lyons), referring to an American paper which had expressed an opinion that practitioners in France are less handicapped by public charities than in England or America, remarks that if the author fancies that French medical men are less put upon (*exploités*) than their American *confrères* he is quite mistaken. It is true that there are fewer dispensaries, but the multiplication of specialists and the opening of departments for patients to be visited at home fully make up for their absence. Then too, there are the mutual aid societies, whose system is to obtain advice, not gratis, but for very little.

ON Monday last the examinations for admission into the Army, Navy, and Indian Medical Services were commenced at the London University. Seventy-three candidates presented themselves for twenty-five commissions in the army, the same number for twenty-eight in the Indian service, and twenty-five for eight in the navy.

IT has been determined that the testimonial subscribed by past and present King's College students on the occasion of Dr. George Johnson's resignation of the Chair of Clinical Medicine shall take the form of a portrait, and Mr. Frank Holl, R.A., has accepted the commission.

IN our announcement in our last issue respecting the forthcoming meeting on behalf of the Hospital Sunday Fund on June 14th, it was stated inadvertently that the meeting would be held in the Guildhall instead of at the Mansion House.

THE Sanitary Registration of Buildings Bill to be introduced by Mr. C. C. Lacaita, M.P., will, we understand, be backed by Dr. Farquharson, M.P., Sir W. Guyer Hunter, M.D., M.P., and Dr. Cameron, M.P.

THE Queen has intimated her intention to become a patron of the National Hospital for the Paralysed and Epileptic (Albany Memorial), Queen-square.

THE 150th anniversary of the founding of the University of Gottingen is to be celebrated next year.

Pharmacology and Therapeutics.

ERGOTINE IN INTERMITTENT FEVER.

DR. S. L. SAVITSKI, writing in the *Vrach* on the value of ergotine in the treatment of intermittent fever, remarks that the drug has been used with success in the treatment of many affections—e.g., by Vidal in prolapsus recti, by Hunt and Pepper in diabetes, by Saunders, Murrell, and Noakes in diabetes insipidus, by Allan for the cough in some lung affections, by Granzio in obstinate constipation, by Gauldmel in the night sweats of phthisis, by de Martini in spermatorrhœa, by Demange in some forms of typhoid fever, and by Girma in general paralysis. It has been also employed in chorea and in dysentery. The theory of its action in these diseases he does not pretend to expound, but he calls attention to the similarity of the action of quinine and ergotine. Both, he says, undoubtedly cause contraction of the uterus and the spleen, the effect of quinine on the uterus having been scientifically worked out in a dissertation published by T. T. Smolski in 1876, and that of ergotine on the spleen having been shown by Dobodchiki (*Vrach*, 1880) and by Semchenko (*Vrach*, 1883). This similarity led him to think that one of these drugs might serve as a substitute for the other, and he therefore made a large number of observations on the effect of ergotine upon the cases of intermittent fever occurring in the Lubinski regiment with excellent results, especially where an enlarged and tender spleen was present. He finds that a combination of ergotine with quinine acts very satisfactorily, and that in this way considerable quantities of quinine can be saved, as half the dose of quinine which would be required if given alone will suffice if combined with ergotine. The preparation of ergotine used was Bonjean's, the dose in chronic cases being about a grain three times a day.

SPARTEIN.

Dr. Gluziniski, in a preliminary note published in the *Przeglad Lekarski*, gives the results of some observations, both physiological and clinical, on the action of sulphate of spartein. Its main action is to slow the heart; besides this, it raises the blood-pressure. On cold-blooded animals it acts with a greater degree of intensity than on mammalia. The action on mammalia may be divided into three periods or stages, during the first and last of which the effects are more marked than during the second. Indeed, in some cases the heart is even quickened during the second period. This may be explained by the existence of some abnormality or pathological change in the irritability of the vagus or of the heart muscle. The reflexes are at first increased, afterwards diminished. Death occurs from asphyxia, and is due not only to the effect on the medulla, but to that experienced by the respiratory muscles. The therapeutic use of spartein is limited to the first stage of its action. Its value consists in the rapidity with which it acts. In some cases, within an hour after the first dose the pulse begins to improve, as well as the subjective sensations of the patient, and no irregularity is produced. Spartein has not so powerful an action as digitalis. It may, however, be useful in cases where the condition of the patient renders it unadvisable to wait for the more tardy effect of digitalis, and it may therefore be used as an adjunct to the latter drug, besides which it may be prescribed where circumstances exist which contra-indicate the use of digitalis.

EUCALYPTOL IN PHTHISIS.

Bouveret has employed hypodermic injections of eucalyptol in the treatment of phthisis. The daily dose of the antiseptic has varied from one gramme and a half to two grammes and a half. The duration of the treatment has been from fourteen to sixteen days. Sixteen cases of phthisis were treated by this method; six of the number had fever, and the remaining ten were without fever. There was rarely any local disturbance at the site of injection. It was certain that the antiseptic was absorbed; it could be detected in the breath, but not in the urine. Albuminuria was not observed as the result of the treatment. It is very doubtful whether the number of bacilli was altered in any way by the method of treatment. Sweating, as a rule, was diminished. Its chief effect is as a balsamic preparation on the bronchial secretion, which it influences favourably. MM. Perret and Chabbannes have made experiments with the 5 per cent. solution of eucalyptol, injecting a mixture of it with tuberculous matter under the skin of guinea-pigs. The general conclusion at which they have arrived is to the effect that the antiseptic is utterly insufficient to prevent the activity of the micro-organism that causes artificial tuberculosis.

HYDRASTIS IN UTERINE HÆMORRHAGE.

Dr. L. Góth has employed the tincture and fluid extract of hydrastis canadensis in various forms of uterine hæmorrhage, especially in disordered menstruation, metrorrhagia, hæmorrhage following abortion, and that occurring at the change of life. The best results were obtained where no organic disease existed, and in the climacteric hæmorrhages. Less satisfactory effects were observed in the menorrhagia of chronic metritis, and no effect at all was produced on hæmorrhage due to erosion of the os uteri or on the secondary hæmorrhage following abortions. The dose of the fluid extract used was twenty drops, and this amount was given several times a day.

HYPNONE.

MM. Mairet and Combemale have published a full account of their investigation into the physiological and therapeutical action of aceto-phenol or hypnone in the current number of the *Archives de Neurologie*. They are forced to conclude that it has no hypnotic action whatever; in this they differ from Dujardin-Beaumetz.

BISMUTH SUBIODIDE.

This is intended to replace iodoform. Iodine fused with bismuth forms bismuth iodide. Boiling the latter with water leads to the precipitation of the subiodide as a fine powder. It, like iodol, is said to be inodorous, and yet to be equally as effective as iodoform as an antiseptic.

HEALTH OF THE NAVY.

THE statistical report on the health of the Navy for the year 1885, which has just been presented to Parliament, shows, on the whole, a very favourable state of the sanitary condition of the force. The average strength afloat during the year was 46,670; the cases of disease or injury amounted to 1103 per 1000 of the strength, the deaths to 7·04, the invalided to 35·65, and the daily sick to 46·28 per 1000. These ratios are all considerably under those of the preceding year, and are also under the average of the last ten years. The marked reduction in the invalided, however, is probably due to an alteration in the returns under that head; for, if we understand rightly the remark on page xvii., "invalided" has hitherto included men sent home from foreign stations for change, as well as those discharged the service on account of disability; but on the present occasion only the latter are shown in the tables. We would suggest that the heading "discharged as invalids" would more accurately define the nature of the proceeding. Compared with 1884, the reduction in the admissions has taken place chiefly in paroxysmal fevers, rheumatism, syphilis, and injuries; in the deaths, in those from fevers and injuries; and in the invaliding, from fevers, debility, and injuries. The reduction in the death-rate has been well marked on the Home, Pacific, African, and East Indian stations. On all the others there has been an increase, though in none of them to any very marked extent.

The strength of the force afloat on the home station was 23,100; the cases amounted to 880, the deaths to 4·76, the invalided to 26·53, and the mean daily sick to 45·09 per 1000 of strength. These are all lower than the corresponding ratios in 1884. The reduction in the deaths, amounting to 3·47 per 1000, occurred chiefly in those from injuries, which were raised to an abnormal amount in 1884 by the loss of the *Wasp* on the Irish coast; in the present report only 10 deaths are returned in this class, as against 65 in the preceding year. Fifty-two cases of scarlet fever were reported, of which 35 occurred in the *Britannia* training-ship. The disease appears to have been brought by one of the cadets on his return from leave; he was attacked on Feb. 6th; on the 19th 10 cases were sent to hospital, on the 20th there were 8, and the others between that date and March 7th; they were all sent to the Cadets' Hospital on shore and recovered. The ship was cleared out and disin-

fected, and there was no recurrence of the disease. In June and July 10 cases of rötheln occurred on board the same ship. Twenty-two cases of enteric fever are returned on the home station, but 6 of them were contracted at Malta. Most of the cases occurred singly in ships; 4 only terminated fatally. Mumps prevailed to a considerable extent, 166 cases having been treated; of these 129 were on board the boys' training-ships. One of these, the *Lion*, also furnished a high proportion of cases of diseases of the respiratory system, including 38 of pneumonia, and the medical officer remarks that "damp decks, from too frequent wettings, with defective ventilation and overcrowding at times, have been, to a great extent, factors in the excess of this disease." A death from pyæmia occurred in the person of the junior medical officer of the *Ganges*, the result of an accidental puncture in the forehead by a suture needle while engaged in a post-mortem examination. On the Mediterranean station an average force of 5360 furnished 1342 cases, 8·02 deaths, 79·66 invalids, and 53·94 daily sick per 1000. The cases were considerably under, and the deaths 2·03 above, the ratios in 1884. The reduction in the cases was chiefly in those of rheumatism, syphilis, and diseases of the respiratory and digestive systems; and the increase in the deaths in those from continued fevers, diseases of the nervous system, and injuries received in action, the latter being from spear wounds in the attack by the Soudanese near Suakim on the 22nd March. There were 55 cases of enteric fever, with 12 deaths, in the squadron; of these 45 cases occurred at Malta during the last quarter—3 in October, 3 in November, and 37 in December. This outbreak was believed to have been the result of a contaminated water-supply, and it is stated that "one of the naval tanks—that, in fact, from which the water was at the time being taken for the ships—had not been cleaned out for a number of years, and the water, on being examined by the Government analyst, was found to contain a large quantity of albuminoid ammonia, and pronounced unfit for drinking." There seems good reason, however, to think that the water contamination was much more widespread, and that the disease was contracted, "not on board the ships, not by the drinking-water brought on board, and not by the stagnant air of the Grand Harbour, but by the impure water that the men drink when on shore on leave." The quality of the water from wells and the storing tanks is said to be most unsatisfactory, and enteric fever to have been prevailing as an epidemic among the troops and civil population at the end of the year. When it broke out in the fleet an order was issued by the commander-in-chief "that only condensed water was to be used in Her Majesty's ships until further orders." Works are in progress for an improved water-supply, and a new system of drainage is being carried out, which it is hoped will prove successful in reducing the prevalence of fever in the island. There were only 3 deaths from injuries, omitting those received in action already noted; one was by drowning, and 2 were from fractured skull by falls from aloft.

The force on the North American and West India stations averaged 2400; the cases were in the ratio of 993, the deaths of 5·0, the invaliding of 23·75, and the daily sick of 35·47 per 1000. These very closely correspond with the results of the preceding year, but contrast favourably with the average of the last ten years. The only disease requiring special notice was yellow fever, which appeared in Jamaica about the end of September. One case occurred in an engine-room artificer of the *Tyne*, and 9 cases with 3 deaths among the crew of the *Urgent* in Port Royal Harbour, contracted apparently on shore. No information is given as to any sanitary measures being adopted, nor does the *Tyne* appear to have been sent to sea—the usual course followed on such occasions. Of the 12 deaths which occurred on the station, 4 were from accidental drowning, and one from fracture of the skull by an accidental blow.

On the South-east Coast of America station, in a force of 510 the cases amounted to 1208, the deaths to 5·88, the invalids to 25·49, and the daily sick to 37·13 per 1000. The cases and mean sick were higher than in 1884, but all the ratios were under the average of the last ten years. Seven cases of enteric fever, with 2 deaths, occurred in the *Ready*, at Monte Video, between Feb. 4th and March 5th, evidently the result of a contaminated water-supply. The description given by the medical officer of the sources of supply and the condition of the storing reservoir is such as would warrant a prohibition to water ships there until some efficient steps have been taken to prevent contamination.

The Pacific station, from a force of 1710, had 1140 cases, 2·33 deaths, 32·16 invalided, and 46·07 daily sick per 1000 of strength. The cases and daily sick were higher, but the deaths and invaliding lower than in the preceding years, and the cases and deaths under the average. There was nothing in the returns which calls for special notice.

The African station, including the West Coast and Cape of Good Hope, had an average force of 1750. The cases were 1084, the deaths 4·57, the invalided 34·85, and the daily sick 36·13 per 1000 of the strength—all lower than in 1884, and under the decennial average. The cases of paroxysmal fever were less numerous than in the preceding year, but above the average; none of them terminated fatally. The disease was contracted chiefly on the West Coast. Quinine was given as a prophylactic, but does not appear to have been successful. Of the 8 deaths, 3 were the result of accidents.

On the East Indies station the average strength was 1900; the cases were in the ratio of 15·66, the deaths of 16·31, the invalided of 60·52, and the daily sick of 51·24 per 1000. These ratios are all much under those of 1884, and, except the deaths, are under the decennial average. Of the 31 deaths, 8 were by cholera, 4 from the *Briton* in Bombay Harbour, and 4 with the Field Force expedition in Burmah; and there were 7 deaths by drowning. The death-rate by disease, exclusive of cholera, was only 8·42 per 1000; diseases of the digestive system were the most fatal, giving a ratio of 3·68 per 1000.

In an average force of 3670 on the China station, there were 1556 cases, 9·26 deaths, 22·34 invalided, and 46·19 daily sick per 1000 of strength. There were 12 cases, with 2 deaths, returned as enteric fever, and 7, with 3 deaths, as typho-malarial fever, but the latter appeared to have been enteric. Eight of the cases, 4 of which terminated fatally, occurred in the *Audacious*, and 6 cases, with 1 death, in the *Cleopatra*. All but two occurred in officers, and were believed to have originated at Nagasaki. The exact source of the disease is doubtful, but it is suggested that it may "be accounted for by the fact that the officers made use of the hotels situated in the heart of the native town, and often dined there, these hotels being in a sickly state at the time." There were 10 cases of cholera, with 4 deaths, all of which appeared to have been contracted on shore at Hong Kong, Shanghai, and Nagasaki. "Cholera seems to be deeply rooted in all the Chinese ports, and must be expected to remain there until the value of sanitation comes to be appreciated in China." Diseases of the digestive system, especially diarrhœa, were unusually prevalent in the Japanese ports and at Hong Kong, the cases having amounted to 323 per 1000 of the strength.

On the Australian station the strength was 1420; the cases amounted to 1195, the deaths to 7·74, the invalided to 30·28, and the daily sick to 39·02 per 1000—all, except the daily sick, higher than in 1884, but under the average. Two-thirds of the deaths and upwards of one-fourth of the cases were returned under the class of injuries. Fourteen cases and 2 deaths of enteric fever occurred, of which 13 were contracted at Sydney and one at Brisbane. The disease at Sydney was believed to have been caused by defective sewerage and scanty water-supply. "Sydney still holds its position ... ... as the chief source of enteric fever in the squadron on the Australian station."

The Irregular Force, in which were included the Nile Expedition for eight months, and the Marines serving in Egypt and the Soudan for a little over six months, averaged 4850 strong. The cases furnished by it were 1385, the deaths 15·05, the invalided 40·82, and the daily sick 53·74 per 1000; one-third of the deaths were of men killed in action; of the 26 reported under this head, 17 occurred in the Nile expedition, consisting of 90 officers and men, and 9 at the zereba near Suakim, the former mostly by spear and sword wounds, and the latter by gunshot. Twenty-six cases and 12 deaths of enteric fever were returned; 5 of these, all fatal, were in the Nile expedition, and the greater part of the rest at Suakim and Alexandria. Twenty-one cases of heatstroke were recorded, of which 19 occurred among the men employed in Egypt and in the Nile expedition; only one terminated fatally. In addition to the 26 deaths in action, there were 13 by injuries, of which 6 were from fracture, 5 by drowning, and 2 by suicide.

The strength of the Royal Marine Divisions at headquarters, not included in the returns of men afloat, was 4880; the cases among them were 1293, the deaths 5·52, the

invalided 55·5, and the daily sick 62·42 per 1000 of strength, all in excess of the proportion in the preceding year. The admissions were much higher than among the troops serving in the United Kingdom, but the deaths and daily sick correspond very closely in the two branches of the service.

THE INFIRMARY FOR CONSUMPTION, MARGARET STREET.

WE regret to learn that through the apathy of the main body of the governors of the above institution, the homœopathic party were enabled at the special general meeting on Wednesday, to outvote by three the old body of governors, including the majority of the executive committee and medical staff.

After the notice convening the meeting had been read, the Rev. W. R. Mowll, M.A., moved a resolution to the effect that Drs. Jagielski and Marsh should cease from practising homœopathy at the Margaret-street Infirmary; further, that Dr. Jagielski should take his name from the Homœopathic Directory, and that Dr. Marsh should resign his appointment at the Homœopathic Hospital, or resign their appointments at this infirmary. This was seconded by Captain Hunter Baillie, and spoken to by Dr. Cholmeley, one of the consulting physicians, who in an able speech pointed out the incongruity of the present state of things, and said that nowhere in the United Kingdom was there an institution officered by a mixed staff of allopaths (so called) and homœopaths. He also stated that, should the resolution be lost, he and the six members of the staff who thought with him could no longer conscientiously retain their appointments, and read a letter from Dr. T. Hawksley, the senior consulting physician (who was too ill to be present) in favour of the resolution.

An amendment was moved by Dr. Dudgeon (a governor of only six months' standing), and seconded by Mr. D. Bryant (a governor of about three months' standing), which was spoken to by Drs. Jagielski and Marsh, and carried by twenty against seventeen.

Of the twenty who voted for the amendment in support of homœopathy, we understand that several have only recently become governors of the institution—that is, between three and six months, and since the question in dispute has been on the tapis. Of the seventeen who voted in the minority, all are old governors, and have for years given their time and services to the institution, and one of them, Mr. W. H. Baillie, for about forty years.

Lord Grimthorpe was in the chair, but voted with the homœopathic party, as did also Dr. Cooper Torry.

The seven gentlemen of the staff who have decided to resign are Dr. T. Hawksley and Dr. W. Cholmeley, the consulting physicians; Mr. F. Carr Beard, F.R.C.S., the surgeon; and Dr. Featherstone Phibbs, Dr. Julian Willis, Dr. Robert Walford, and Dr. Scudamore Powell, the visiting physicians. The majority of the executive committee also intend to resign—viz., the Rev. J. J. Coxhead, M.A., Rev. W. R. Mowll, M.A., Lieut.-Colonel Hollway, treasurer; Joseph Lott, Esq., solicitor; Captain W. Hunter Baillie, J. A. Pepys, Esq., and St. Leger Bunnett, Esq.

In again expressing our regret, we would warn other institutions by the fate of this one (an infirmary which has been of immense value to the suffering poor), so that they may be on their guard against this thin end of the homœopathic wedge.

THE SEAMEN'S HOSPITAL, GREENWICH.

THE annual meeting of the governors of and subscribers to this institution, which takes up the work carried on by the late *Dreadnought*, was held on the 16th inst., under the presidency of Sir Andrew Clark, Bart., M.D. The sixty-sixth annual report, which was read by the secretary, stated that though the institution had suffered severely during the great commercial depression, the committee had not been compelled to draw upon their reserve funds in order to make the income meet the expenditure. The number of patients treated last year was 2267, and of these 1452 were discharged cured and convalescent, 477 had been relieved, 87 died, and 194 remained under treatment at the close of the year. There were also 5359 out-patients during 1886, making a total of 269,782 patients treated at the institution since its foundation. Sir Andrew Clark gave an account of a visit of inspection he had paid to the hospital, and, commending its management, he urged its claims to the support of the charitable public. The report was adopted, and the customary votes of thanks brought the proceedings to a close.

PROSECUTION OF ORIGINAL RESEARCH IN EDINBURGH.

THE committee appointed to consider and report on the Prosecution of Original Research in connexion with the Royal College of Physicians, Edinburgh, have issued their Report to the President and Fellows of the College. The committee recommend (1) that the College establish and maintain in the neighbourhood of the infirmary a laboratory for the prosecution of original research; (2) that the College vote £1000 for the establishment of this laboratory, and, year by year, a sum not exceeding the third of the clear surplus of annual income over annual expenditure for its maintenance, including the payment of salaries. It is suggested that the laboratory be placed under the care of a curator and committee, with a scientific man as superintendent, at a salary of not less than £200 per annum, and an assistant, to reside on the premises, at a salary of £80; (3) that the laboratory be open without fee to Fellows and Members of the College, and to any investigator, on certain conditions; and (4) that the committee should be empowered, if sufficient funds be at its disposal, to offer yearly a medal and money prize (not exceeding £21) for original work conducted within the laboratory or elsewhere, the results to be embodied in essays to be submitted to the committee, and to be specially connected with medicine, therapeutics, gynæcology, and psychiatric medicine.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5788 births and 3453 deaths were registered during the week ending Feb. 12th. The annual death-rate in these towns, which had steadily declined in the preceding five weeks from 26·5 to 19·6 per 1000, further fell last week to 19·5. During the first six weeks of the current quarter the death-rate in these towns averaged 22·3 per 1000, and was 2·2 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 14·9 in Nottingham, 15·3 in Leicester, 16·1 in Derby, and 16·9 in Leeds. The rates in the other towns ranged upwards to 25·8 in Manchester, 26·9 in Liverpool, 27·1 in Wolverhampton, and 30·1 in Huddersfield. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding four weeks from 485 to 367, further fell last week to 340; they included 95 from whooping-cough, 77 from measles, 61 from scarlet fever, 43 from diphtheria, 32 from diarrhœa, 31 from "fever" (principally enteric), and only 1 from small-pox. No death from any of these zymotic diseases was registered last week in Derby, whereas they caused the highest rates in Norwich, Liverpool, and Huddersfield. The greatest mortality from whooping-cough occurred in Oldham, Sunderland, Huddersfield, and Norwich; from measles in Halifax, Bristol, and Huddersfield; and from scarlet fever in Birkenhead, Liverpool, and Sheffield. The 43 deaths from diphtheria in the twenty-eight towns included 17 in London, 4 in Liverpool, 3 in Birmingham, 3 in Manchester, 3 in Huddersfield, 2 in Portsmouth, 2 in Norwich, 2 in Oldham, and 2 in Hull. Small-pox caused 1 death in Manchester and 1 among the residents of London and its outer ring, but not one in any of the twenty-six other large provincial towns. Only 3 small-pox patients were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding five weeks from 731 to 364, rose again last week to 373, but were so many as 244 below the corrected average. The causes of 89, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical

practitioner or by a coroner. All the causes of death were duly certified in Leicester, Nottingham, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Bradford, Sheffield, and Liverpool.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·7 and 19·8 per 1000 in the preceding two weeks, rose again to 22·0 in the week ending Feb. 12th; this rate exceeded by 2·5 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 13·0 in Perth and 14·4 in Greenock and Leith, to 24·7 in Glasgow and 27·4 in Paisley. The 550 deaths in the eight towns last week showed an increase of 55 upon the low number in the previous week, and included 28 which were referred to whooping-cough, 16 to measles, 14 to diarrhœa, 13 to scarlet fever, 3 to diphtheria, 2 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all 76 deaths resulted from these principal zymotic diseases, against 75 and 66 in the preceding two weeks. These 76 deaths were equal to an annual rate of 3·0 per 1000, which exceeded by 1·1 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 19 and 23 in the preceding two weeks, further rose last week to 28, of which 19 occurred in Glasgow, 3 in Aberdeen, and 3 in Paisley. The 16 deaths from measles showed an increase of 4 upon the number in the previous week, and included 12 in Glasgow and 4 in Aberdeen. The deaths from scarlet fever, which had been 16, 15, and 8 in the previous three weeks, rose again last week to 13, of which 7 occurred in Edinburgh and 4 in Glasgow. The 14 deaths attributed to diarrhœa showed a considerable increase upon recent weekly numbers, and included 5 in Glasgow and 3 in Dundee. The deaths referred to diphtheria and "fever," on the other hand, had considerably declined; 2 fatal cases of diphtheria were returned in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had steadily declined in the first five weeks of the year from 213 to 126, were last week 133, and were 11 below the number returned in the corresponding week of last year. The causes of 71, or nearly 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 28·2 and 29·7 per 1000 in the preceding two weeks, declined again to 27·3 in the week ending Feb. 12th. During the first six weeks of the current quarter the death-rate in the city averaged 30·8, the mean rate during the same period being but 21·1 in London and 21·4 in Edinburgh. The 185 deaths in Dublin last week showed a decline of 16 from the number returned in the previous week, and included 5 which were referred to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 4 to diarrhœa, 3 to whooping-cough, 1 to diphtheria, and not one either to small-pox or measles. Thus the deaths from these principal zymotic diseases, which had been 14 and 13 in the preceding two weeks, rose last week to 17; they were equal to an annual rate of 2·5 per 1000, the rates from the same diseases being 1·5 in London and 2·8 in Edinburgh. The fatal cases of scarlet fever, which had been 6 and 4 in the previous two weeks, were 5 last week, and the deaths from both "fever" and diarrhœa also showed an increase upon the numbers in the previous week. The fatal cases of whooping-cough and diphtheria corresponded with the numbers in the preceding week. The deaths both of infants and of elderly persons showed a decline from the numbers in the previous week. Six inquest cases and 5 deaths from violence were registered; and 51, or more than a quarter, of the deaths occurred in public institutions. The causes of 23, or more than 12 per cent., of the deaths registered during the week were not certified.

VENTNOR HOSPITAL FOR CONSUMPTION.—On Monday last, at the annual general meeting of the governors of this hospital, it was announced that the Duke of Cambridge would preside at a festival dinner at the Hotel Métropole on April 19th, and that in the summer Princess Beatrice would, on behalf of the Queen, open a new block of houses for twenty additional patients.

Correspondence.

"Audi alteram partem."

MEDICAL TREATMENT AT HOSPITALS AND DISPENSARIES.

To the Editors of THE LANCET.

SIRS,—I observe in the report of the proceedings of the Medical Attendance Organisation Committee that a resolution was passed calling "the attention of the governing bodies of hospitals and other public authorities to the necessity of some check on the indiscriminate provision of medical treatment at hospitals and dispensaries." Some years since this question forced itself on the notice of the managers of the Children's Hospital in Great Ormond-street, where the number of out-patients had become so large as to be entirely unmanageable. I have described in my book on Hospital Organisation[1] the manner in which this difficulty was dealt with, and so successfully that the number of out-patients, which had been 13,000 in 1874, was reduced to 9000 in 1876, and might, I believe, have been reduced still further, without inflicting real hardship on any deserving applicant. As the book is now out of print, I ask permission to state the details of the plan, which might, I think, with some possible alterations, be advantageously adopted in London.

The regulations were as follows:—All applicants were entered by the house-surgeon in attendance into two classes—viz., those of slighter ailments to be treated as casualties, and graver ailments to be entered on the register, and to be supplied with letters entitling the bearers to attend for a period of two months. The register and also the letters bore a record of the name and residence of the patient, as also of the occupation and weekly earnings of the parent; and no child whose parent was in receipt of more than 30*s.* per week was considered eligible for permanent treatment. These letters had to be submitted to the secretary or other officers of the Charity Organisation Society of the districts in which the patient lived, and to have the stamp of the Society in verification of the facts stated in the letters, before the patients were considered eligible for *permanent* treatment. Persons in the receipt of parish relief, and those whose income exceeded 30*s.* per week, were considered ineligible, but the medical officers were authorised on *purely medical grounds* to dispense with these regulations; they entering the reasons for so doing in a book provided for the purpose. A further regulation provided for the continuance of a patient for a longer period than two months, at the discretion of the medical officer.

It will be observed that in the first attendance every applicant was admitted without any question, and it happened very rarely that mothers came saying that they had no wish to attend permanently, but desired an opinion on some points concerning which they felt doubts or anxiety. Further, to provide against the exclusion of any on purely social grounds, the medical officers had a dispensing power wherever a case was of special medical interest, or where the treatment it required would be either costly or protracted. The regulations then applied, in reality, to those only who sought for permanent relief in ordinary ailments, and the aim was to deal with them as wisely, and at the same time as gently, as possible. The wife in almost every instance gave an answer, though often not an exact one, as to her husband's earnings, and it was at first attempted to control this statement by requiring that before presenting themselves a second time each letter should be countersigned by some householder, clergyman, city missionary, or other minister of religion. The regulation turned out a farce; the clergy of no persuasion cared to be guilty of the apparent unkindness of refusing their signature to a person asking for it merely to obtain hospital relief, and the small shopkeepers in a poor district did not dare to disoblige their customers. Theoretically, this test of fitness seemed to conciliate kindness and discrimination; practically, it was worthless.

At the time that the help of the Charity Organisation Society was sought for, though no longer on the medical staff of the hospital, I took an active part in its manage-

[1] On Hospital Organisation, with special reference to the Organisation of Hospitals for Children. London, 1877.

ment. Soon after my connexion with the institution ceased, the old system was once more resorted to; and the last report of the hospital shows a total of 14,281 new out-patients in the year 1885. This total represents an annual attendance of 85,686, on the assumption that each child attends six times, or a daily attendance of 279; of whom 46 would be new cases, deduction being of course made for fifty-two Sundays, Christmas Day, Good Friday, and four Bank Holidays. If we reckon that properly to investigate each case, new and old, three minutes is a reasonable time to allow, it appears that fourteen hours would be required; on dividing the labour among four, we find that three hours and a half must be devoted by each medical officer. It is needless to dwell on the time required to supply these patients with the necessary medicines, even though the dispensing arrangements were very good. The failure of the plan was at once assured when the original scheme was departed from, and in deference to the representations of the house-surgeons (who objected to be called on to put questions to the mother concerning their husbands' earnings or concerning any matter not purely medical) the preliminary inquiry at the hospital was given up. The officer of the Society was at once placed in an entirely different position when called on not merely to verify a statement, but to institute an entirely new inquiry for the conduct of which he had no data. He at once was placed in the offensive position of the relieving officer of the parish, who is supposed popularly to derive his name from its being his duty to refuse relief. The failure of the plan was secured by this apparently insignificant change, just as surely as the upset of a carriage by the removal of the lynch-pin. It would probably not have been difficult to entrust the preliminary inquiries at the hospital to others than the house-surgeons; but unfortunately the diminution of the number of out-patients was not seen with friendly eyes by many. The medical officers for in-patients did not like a scheme by which the field whence cases of medical interest were gleaned was diminished in extent; the subscribers sometimes objected to their letter of recommendation being submitted to inquiry; while the committee fancied that the larger the number of out-patients, the greater the claim of the charity to public support. A few complaints, too, were made by the patients themselves of the inquisitorial nature of the questions put by the agents of the Charity Organisation Society. Very few indeed of these complaints were well substantiated; while, to the best of my recollection, none were made during the time when the preliminary inquiries were made in the first instance at the hospital, and were referred for verification only to the Charity Organisation Society. The difficulty is one felt in France as well as in this country. My excuse for occupying so much of your valuable space is that I have seen no other plan proposed for dealing with it, and that, while it no doubt may be altered for the better, it at least attained the object for which it was started.

I am, Sirs, yours faithfully,

CHARLES WEST, M.D.,
Founder of the Hospital for Sick Children.

Harley-street, W., Feb. 7th, 1887.

"GENERAL HOSPITALS AND PARISH INFIRMARIES."

To the Editors of THE LANCET.

SIRS,—Allow me to make a few remarks in criticism of Dr. Goodhart's letter in your last issue respecting general hospitals and parish infirmaries. As the medical superintendent for nearly ten years of the largest of these infirmaries, I may perhaps be considered to have some slight special knowledge on the subject.

Dr. Goodhart's objections range themselves under the following heads:—1. It is an injustice to the ratepayer to have built, and to compel him to keep up, magnificent parish infirmaries. 2. That they do harm to the general hospital. 3. That they do injustice to the patients that are admitted within their doors; and he instances this result especially in surgical cases.

Take the first objection—that of injustice to the ratepayer (although, further on, Dr. Goodhart naïvely confesses he does not care much about him if his own hospital is not affected injuriously). I maintain the present system is not so. It is not expensive for the work done. The ratepayer has his work done for him much cheaper and quite as efficiently as at the general hospitals. I believe that the public has not much idea, after all, of how little is the actual cost for the maintenance of the sick poor. I have before me now the Local Government Board's "Return of Expenditure at the various Metropolitan Infirmaries," and I find that the total actual cost per head per week, including salaries, drugs, stimulants, and, in fact, every expense, is at St. Saviour's Infirmary 8*s.*, at St. George's, Hanover-square, 13*s.*, Lambeth 14*s.* 2*d.*, Kensington 14*s.* 2*d.*, and at St. Marylebone, which is admittedly, if I may use the expression, an extravagant infirmary, 15*s.* 10*d.* I have no means at hand of knowing myself the cost per head in the general hospitals, but I should imagine in most cases it much exceeds this. The reason why St. Saviour's is so low is that most of the labour is done by pauper help, and that there are many inmates who by rights should not be in the infirmary proper, but rather in the infirm wards of the workhouses.

The second objection of Dr. Goodhart I would reserve for the moment, simply remarking that from the point of view of the ratepayer, or of the sick actually in the infirmary, "doing harm to the hospitals" does not concern them.

Thirdly, that they necessarily do injustice to the patients, especially in surgical cases, I emphatically deny. If there is one branch of practice in which we have had the most satisfactory results, it is in surgery. I have not had leisure, for various reasons, during the last few years, nor have I time just at present, to publish my surgical statistics; but I hope to be able to do so at no distant date, and the results will be found to bear very favourable comparison with those of any general hospital. One would imagine that all surgical skill and knowledge is monopolised by *hospital* staffs! I don't believe it. I could tell more strange stories from personal experience of patients who have come under my care from general hospitals. One perhaps I may be permitted to quote. An old man who had fallen heavily on his side was carried to a certain hospital, complaining principally of pain in the left knee. For this the knee was carefully strapped and bandaged, and the patient sent home. The next day he was admitted here, when I found the knee absolutely uninjured, but there was a comminuted fracture of the left hip, with extensive bruising of the soft parts. On his death, a few days afterwards, from the effects of chronic bronchitis and severe fog, the diagnosis was fully verified at a necropsy, and the head and neck of the femur were found broken into four pieces! To anyone who has a bent for surgery, with a fair surgical education, it is absurd to suppose that he is not quite capable of undertaking any ordinary surgical operation. As for very rare or special cases, we seldom see them; these are too readily snatched up at hospitals; but, when we do come across such a one, some of us are quite able to undertake it, with, perhaps, some little extra assistance in the form of advice and opinion, which I have never found any difficulty in obtaining, even from some of the most eminent surgeons.

Surgical appliances are admittedly very expensive. Some certainly are, but I will not admit that they are always necessary, certainly not as a rule in parish infirmaries. I am often astonished, on visiting hospitals, to see the amount and quality of the dressings and appliances used. No wonder that under such conditions surgery is expensive and hospitals poor. Gauze dressings, gauze bandages, strapping, complicated splints, expensive drugs and appliances, are used with a reckless disregard to cost which is appalling to an onlooker. I can get quite as good results with some marine lint, a little Gamgee tissue, a very few layers of gauze, an ordinary calico bandage, and such cheap drugs as terebene, carbolic acid, iodine water, corrosive sublimate, and such-like. I have been answered by hospital surgeons: "Oh, yes, it is all very well for you, with healthy wards not crowded with surgical cases, to use simple appliances and dressings; but we cannot, with our surroundings." Well, this may be so, but I doubt it.

Dr. Goodhart says that the advanced surgery of the present day should always be a matter of free consultation. I entirely agree with him. I have always maintained that a patient has an absolute claim to it. I should like to ask him, however, how often amongst his surgical colleagues does this free consultation ever take place. When I was at the hospital I should say almost never, or "hardly ever." Look, on the other hand, at St. Bartholomew's, where there is a regular consultation of the staff once a week openly in the theatre. Could one find a proceeding more conducive to the welfare of patients and to the interest of the students?—not only to the benefit of the students from hearing the

various opinions expressed, but also in acquiring a notion of the forms and etiquette of consultation, a knowledge which cannot but be of great advantage in after-life. Again, on operation days at Guy's some years ago, one always saw two or three at least of the surgeons in the operating-room, assisting, at any rate, by their presence. Students liked to see them; it showed an interest in the hospital, it helped to develop an *esprit de corps* in one's *alma mater*. I remember how glad and proud one used to feel to be able to point out to strangers coming to operations, That is Mr. A., who wrote such-and-such a book, a great man on so-and-so; or, That is Mr. B., a very clever man—splendid fellow; why, he actually removed a kidney! And one felt a glow of pride in thinking what wonderful men *our* hospital possessed! Now, I regret to see that much of this has changed. The surgeon who is operating is generally without a colleague present; one may occasionally drop in apparently accidentally, look over the operator's shoulder, and walk out. Or operations are going on in three or four wards at once, and one never knows where any operation on the list is likely to be performed. This, I urge, is not just to the students, all of whom have a sort of pre-emptive right to an opportunity of seeing every operation, except of course those in which the patient might suffer from his presence, and it is, I am sure, a real grievance. As a matter of fact, the patients here have the advantage always of two opinions, and in very critical or doubtful cases one frequently calls for other advice in the persons of various consultants, whom I have always found most kind and willing with advice, and to many of whom I am much indebted. The proposition of having a consultant staff is more particularly because, as far as the medical officers are concerned, we feel we should not be dependent on the courteous kindness and gratuitous services of eminent medical men. It is only just and right that they should receive some fee, and that the pernicious system of continually enlarging the sphere of unpaid medical services should be avoided. Undoubtedly, there is a great deal of work in these infirmaries, and an increase in the medical staff is desirable. It must be remembered, however, that although we have a great number of cases, many of a serious nature, involving much time and attention, there is a large proportion of trivial ones, trivial at least as far as actual work in treatment goes, although perhaps not so in respect of pathological interest. A large proportion of our cases consists of chronic ulcers, chronic bronchitis, chronic gout, chronic rheumatoid arthritis, forms of paralysis in old people, and bedridden cases from senile decay. All these do not entail a large expenditure of time, so that to say that we have large general hospitals is not exactly correct. Two resident medical officers (and in every infirmary there are now two), not engaged in other practice and devoting their whole time to the duties, can get through a great deal of work.

I am afraid that I have already trespassed too much on your space, and will leave the questions as to the utilisation of these infirmaries for clinical studies, as to their proposed affiliation to the general hospitals, and as to the merits and demerits of the present system, to another letter, should you be willing to accord me space at a future opportunity.

I am Sirs, your obedient servant,

CHARLES GROSS, M.D. Lond., F.R.C.S. Eng.

St. Saviour's Union Infirmary, Walworth, Feb. 15th, 1887.

*** We have received several other letters on the above subject, for which, however, we cannot find room this week.—ED. L.

MEDICAL CORONERSHIPS.

To the Editors of THE LANCET.

SIRS,—Will you allow me to make a few remarks in reference to this subject, as suggested by Dr. Macdonald's letter which appeared in your issue of last week. Having been a candidate for the last appointment, until promised the deputyship by Mr. R. Collier should he have proved successful, he having held that post for ten years, and having on that promise withdrawn my name from the contest, and now being a candidate and having issued my address in your columns, my remarks may be pardoned on the subject. I quite agree with Dr. Macdonald that the medical and not the legal profession are the proper persons to act as coroners. Dr. Macdonald may not be aware of one clause which now stands in the new Coroners Act, and which I believe has passed the second reading, to the effect that the appointment of coroner should be *only eligible* to barristers or solicitors. Surely this clause has crept in unchallenged. I have seen no allusion to it at all, and therefore draw attention to it. The legal profession are so inundated with appointments that they can well give up their absolute claim to such a post. I quite agree with Dr. Macdonald, that the coroner should, if possible, combine a medical and legal knowledge. Having graduated both in law and medicine, I felt that I had unusual demands for such an appointment. As to the election, I think that it should rest with the Middlesex magistrates, and not with, as has proved to be the case, members of the Odd Fellows, Foresters, and Druids, because they were members of these respective halls, which were in the eastern division of Middlesex; and also with boatmen, who, mooring their boats on the foreshore of the Thames, claimed a privilege to vote. Such farcical nonsense ought surely to be put a stop to, and some Act of Parliament passed to legislate in these matters.

I am, Sirs, your obedient servant,

Feb. 15th, 1887. L. FORBES WINSLOW, D.C.L. Oxon.

"EPIDEMIC DIARRHŒA."

To the Editors of THE LANCET.

SIRS,—We also have been visited in this neighbourhood (St. James's) with an epidemic of diarrhœa—"winter cholera," as the people call it. The attacks come on with great suddenness, often after the evening meal, and, in most of the cases I see, the symptoms become aggravated at night after the patient goes to bed. Severe pain is, as a rule, a prominent symptom, but I have seen more than one case in which, whilst the intestinal catarrh has been profuse, there has been no pain from first to last. I am disposed to attribute the outbreak to atmospheric influences solely.

I am, Sirs, your obedient servant,

Piccadilly, Feb. 15th, 1887. T. BROWNE O'CONNOR.

To the Editors of THE LANCET.

SIRS,—Within the past fortnight several cases of diarrhœa have occurred in my practice in this neighbourhood (Bayswater, W.). Some of the cases have been of extreme severity. The symptoms in all were: pain of a griping character, referred to the region of the umbilicus; frequent diarrhœa of, at first, bilious matter, subsequently becoming of a watery nature; vomiting, thirst, loss of appetite, and general prostration. In one case the symptoms were much aggravated, having, in addition to those above, cramps in the muscles of the abdomen and lower extremities, pulse small, weak, and frequent, almost complete suppression of urine, sunken eyes, and general depression of strength. The attacks lasted from three to six or seven days, and recovered under appropriate treatment. As other districts were affected in a similar manner, perhaps atmospheric influences and water-supply have had a good deal to do with this (at this season of the year) unexpected visitation.

I am, Sirs, yours faithfully,

Pembridge-gardens, W., Feb. 15th, 1887. JOHN WHEELER, M.D.

*** On the above subject Dr. Shirtliff of Kingston-on-Thames also sends a communication, in which he mentions cases that have occurred in his district exhibiting symptoms similar to those described above, and expresses the opinion that the disease is attributable to cold.—ED. L.

THE UNIVERSITY OF EDINBURGH.

To the Editors of THE LANCET.

SIRS,—I have read in THE LANCET of the 12th inst. Professor Rutherford's letter of the 9th inst. I am exceedingly reluctant to enter upon any correspondence in reference to the attack made upon me by Professor Rutherford, more especially after the remarks made by him to his class on the 28th ult. In the course of these he is reported to have said that the time would come when all the facts of the case would be known, and until that time he asked his students to suspend their judgment. I looked upon this statement as an intimation by Professor Rutherford that an inquiry will be made by the Senatus Academicus, or by the University Court, into the whole matter. I can only say that I shall hail such an inquiry with much satisfaction, more especially after what Professor Rutherford

has said and written since his letter of apology was given to me. As regards Professor Rutherford's letter of the 9th inst. to THE LANCET, I think it only necessary for me to send you, as I do, a copy of his letter of apology to me of the 17th ult., which speaks for itself. I shall merely further add that immediately after the incident of the 11th of December last, I put the matter into the hands of my solicitors in order that they might take what proceedings they thought necessary for my complete vindication, and that the conclusion of the correspondence with Professor Rutherford's solicitors was that, after consultation by him with his solicitors and counsel, this letter of apology, written by Professor Rutherford's own hand, was received by me.

I am, Sirs, your obedient servant,

Edinburgh, Feb. 15th, 1887. HERBERT H. ASHDOWN.

THE PRESENCE OF BLOOD IN THE PERITONEUM.

To the Editors of THE LANCET.

SIRS,—I am amazed that Dr. Hunter should be so ignorant of the facts of the surgery and pathology of the human peritoneum—he a graduate of the University in the city where Keith lives. He seems to have squirted blood of various kinds and from various sources, foreign and domestic, into the peritoneal cavities of dogs and guinea-pigs without ill results. We, on the contrary, cannot even allow a small quantity of a woman's own blood to remain in her abdomen without fear of trouble; so, following Keith, we clear it out by sponging, washing, and the drainage-tube, with every possible care we can exercise. Then we get good results; and Dr. Hunter ventures to say I have not adduced facts in support of these views. I have been doing as much as I can in this direction for the last twelve years. It is in the human subject, and in that only, that we must look for guiding facts for human surgery. We have been led astray too far and too long by experiments on dogs and guinea-pigs.

I am, Sirs, yours &c.,

Birmingham, Feb. 12th, 1887. LAWSON TAIT.

"DR. BRUNTON AND HOMŒOPATHY."

To the Editors of THE LANCET.

SIRS,—In the preface to the third edition of my Pharmacology I have discussed various criticisms of earlier editions, and have also expressed my opinions regarding homœopathy. As the book will be out in a few days, I think it unnecessary to occupy your columns with extracts from the preface.

I am, Sirs, your obedient servant,

Welbeck-street, W., Feb. 14th, 1887. T. LAUDER BRUNTON.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

THE NEWCASTLE DISPENSARY.

THE annual meeting of this old institution has been held, and it has presented its 109th annual report, which shows that the number of letter patients showed a decrease of 826 as compared with the previous year. There was, however, an increase of 2722 in the number of casual patients, and this was the largest number of patients of this class admitted in any one year. The medical report showed that 6201 patients had been admitted by letter, while the total number treated had been 22,936. The medical officer (Dr. Beatley) suggested a closer inquiry into the circumstances of patients by donors of letters of recommendation. The increase of casual patients was in a great measure due to the adoption of a charge in these cases at the Newcastle Infirmary, which had caused an unusual influx at the Dispensary. This gave rise to some remarks from the chairman, Mr. R. H. Holmes, who suggested that it would perhaps become necessary to appoint an officer to make inquiries into these cases. The financial statement was satisfactory. A vote of thanks was given to the medical staff, and the chairman especially referred to the loss the institution was about to sustain in the services of Dr. Beatley, who is retiring to commence practice in this city.

THE CHEST HOSPITAL.

The annual meeting of the Chest Hospital has also been held here. The report showed that 596 patients in all had been treated during the year. An increase over the previous year. This institution is doing as much good as possible within its limited means, but if it is to move with the times and keep pace with the other charities of the city it must throw itself on the public, and at once abolish the "letter" system with which it has been hampered since its birth.

GATESHEAD DISPENSARY.

At the annual meeting of the Gateshead Dispensary just held the medical report showed that the number of patients treated during the year by letter had been 2733; of this number 995 were treated at the hospital and 1738 at their own homes. The total number of patients treated during the year was 13,265, against 12,974 in 1885. The town, it was mentioned, had been wonderfully free from infectious diseases during the past year. The financial statement was satisfactory; there had been an excess of income over expenditure of £166. The chairman, the Rev. Moore Ede, said he believed the time was come when the provident system should be tried side by side with the charitable elements in dispensary management. This brought up Dr. Green, a practitioner in the town, who pointed out that at least one-half of the medical men in Gateshead took patients already on the provident system, a system under which, in the form of a club they paid 3*d.* per week. He (Dr. Green) protested against what was called "the provident system" becoming introduced in connexion with charities, which he contended had their endowments for charity alone. At the suggestion of Dr. Newcombe a committee was appointed in connexion with the dispensary to consider the question of having nurses on its staff in order to attend on patients requiring their aid.

THE MATCH POISONING CRAZE.

Dr. Philipson, in submitting the last annual report of the infirmary, referred to "a remarkable feature in the social history of Newcastle"—namely, the so-called "match-poisoning craze" which has characterised the past year, nine cases of poisoning by phosphorus from a solution of match heads having been admitted into the infirmary, all of which recovered, but after suffering intensely. I may state, in connexion with this "craze," that many cases ended fatally in this city, and in its vicinity the mania had a very rapid "run," so to speak, cases for some time being reported weekly. Happily it now seems to have died out.

Newcastle-on-Tyne, Feb. 14th.

EDINBURGH.

(*From our own Correspondent.*)

THE NEW UNIVERSITY BUILDINGS.

LAST Monday the Chancellor of the Exchequer had an interview with a deputation from the University, consisting of the Principal, the Chairman of the Buildings Committee, and several noblemen and gentlemen, in reference to a proposed grant of £12,000 from Government for the completion of the new medical buildings. Owing to the munificence of a private donor, the University has already at its disposal a sum of money considered adequate to complete the graduation hall and the tower, but as yet no provision has been made for the purchase of the site on which these parts of the original plan of the building are to be erected. In addressing Mr. Goschen, Sir W. Muir and Sir W. Turner laid stress upon the fact that but for lack of means to purchase the site the buildings themselves would already be in course of erection, and urged the desirableness of a Government grant to aid in the completion of works of such national importance. It is feared that the reply of the right honourable gentleman does not indicate any immediate intention on the part of the Treasury to accede to this request, for, while expressing his regard for the interests of the University, Mr. Goschen hinted that there were difficulties of a serious nature in the way of making the grant, chiefly in regard to other claims likely to be strongly represented should the present action give a precedent for such demands. At the same time, he promised that the subject should receive his best consideration; and with this ray of consolation the deputation withdrew. There seems to be a possibility that a much smaller grant than that asked for may be given, on the condition that the remainder of the sum required shall be forthcoming from other sources.

In any case, the University authorities deserve high commendation for their energetic efforts. The building, which is a remarkably beautiful piece of architecture, still lacks the balance which a whole additional wing would give it, and in the internal economy of the University the absence of any hall for academic ceremonials is constantly felt to be a pressing want. Now that interest is so thoroughly awakened in the matter, one may fairly hope that at an early date this want will be satisfied.

SCARLET FEVER IN EDINBURGH.

For some weeks scarlet fever has been present in Edinburgh in an epidemic form. All parts of the city and all classes of the community seem equally affected, and the City Fever Hospital is crowded with patients of all ages and conditions, for since it has ceased to be a purely charitable institution, but has been supported by borough rates, it has been much more largely made use of by patients of the upper classes, greatly to the benefit of the public health. At present there are 202 patients in hospital, of whom 150 are suffering from scarlet fever. There is considerable discussion as to the cause of the outbreak. The city medical authorities have not as yet published any special recommendations on the avoidance of infection beyond the directions as to procedure in cases of infectious disease, of which a most useful code has been in the hands of the public for some years. They are, however, very alert in the visitation and isolation of suspected cases, having a most complete system for carrying this out. Failing any special order on the subject from the authorities, Dr. Foulis has written to the local papers recommending that all milk received for domestic consumption should be boiled for five minutes before it is used, and that the vessels containing it should be scalded thoroughly, with the view of destroying the specific virus of the disease. He points out that such a process in no way detracts from the character of the milk as an article of diet, while it is calculated to destroy the germs of most infective diseases. At the meeting of the Town Council, held on Tuesday, Bailie Russell, M.D., convener of the Public Health Committee, announced that the Fever Hospital was filled with patients beyond the limits of its intended accommodation, and that the Council must at once undertake to furnish additional wards. This was agreed to, and relegated to the Public Health Committee, with full powers to act. A large addition has also been rendered necessary in the nursing staff. Up to the present there has been a daily increase in the extent of the epidemic.

Edinburgh, Feb. 15th.

DUBLIN.

(From our own Correspondent.)

ALLEGED ILL-TREATMENT OF A PATIENT IN MERCER'S HOSPITAL.

IN the Green-street Court-house last week, before Mr. Justice Murphy, Dr. B. Kennedy, resident surgeon of Mercer's Hospital, was indicted for having assaulted a patient named Farrell, in August last. Dr. Kennedy had been indicted for manslaughter, but the bill had been thrown out by the grand jury; after some evidence had been given, the jury were of opinion that the case should not go on, to which his lordship agreed. He said that Dr. Kennedy would not have been warranted in leaving a delirious man among the other patients, for if anything had happened in consequence he would have been censured. He could not say from the evidence that he had used unnecessary violence. The case had been got up against Dr. Kennedy by witnesses obtained here and there, and suggestions made by a man who was expelled from the hospital, but who did not now appear. However, it was best for the accused that an open investigation in that court should be held. The jury acquitted Dr. Kennedy, and appended the following rider to their verdict:—"We consider that, according to the evidence, Dr. Kennedy should not have been subjected to the hardship of a prosecution." All must sympathise with Dr. Kennedy in the anxiety, annoyance, and expense to which he has been so unjustly subjected.

THOMPSON MEMORIAL HOME, LISBURN.

This institution, founded in 1885 in memory of a distinguished surgeon, was established for the admission of patients suffering from incurable diseases. The Home was founded by the widow, daughter, and son-in-law of the late Dr. Thompson. I may state that the site, grounds, furniture, and fittings cost £23,767. The second annual meeting was held last week, when it was shown that at the close of 1886 there were thirty-six patients in the Home, while the income exceeded the expenditure by about £300. To the sum of £60,000, set apart by the promoters of the charity, Mrs. Bruce has added £10,000 in memory of her mother (Mrs. Thompson), and also a sum of £5000 in memory of her brothers. It is contemplated to admit deserving cases until the inmates number fifty-five. The memorial is a magnificent one, considered as the outcome of generosity on the part of a single family.

CITY OF DUBLIN HOSPITAL.

This morning I had an opportunity of seeing some very interesting cases at this hospital. A tumour of the occipital region with marked head symptoms, which probably will require Mr. Wheeler to trephine; and a patient of the same surgeon with aneurysm, for which he may be obliged to ligature the subclavian or arteria innominata. An obscure tumour (probably malignant disease of the pancreas), under Mr. Henry Fitzgibbon; also under the latter gentleman's care a case of a child who some time since fractured his thigh, and though union has taken place, there exists a piece of bone the size of a walnut, which freely moves about, and yet there is no shortening. There is also under Mr. H. Gray Croly a case of lumbar colotomy, with interesting details, this being his ninth successful case. The same morning Mr. Fitzgibbon operated for external piles, with Smith's clamp, knife, and thermo-cautery.

NATIONAL EYE AND EAR INFIRMARY.

The performance of the "Sleeping Beauty," held last month in aid of the funds of this hospital, has realised a sum of £62 13*s.* 11*d.*

KILKENNY TOWN COUNCIL AND ANALYST'S FEES.

At the quarterly meeting of the Town Council last week a notice of motion that the services of Sir Charles Cameron be dispensed with was under consideration. The majority of the Council appeared not to value the services of the eminent medical officer of health and city analyst for Dublin; they considered that the local medical practitioners were sufficiently skilled to undertake analytical duties, probably forgetting that a special course of study is absolutely necessary, and that the salary attached to the post (£5 per annum) would not defray the interest on the cost of the necessary instruments. The resolution, however, was adopted by eleven votes against three.

Dr. C. Nixon has been appointed a member of the Senate of the Royal University of Ireland, vice Dr. Lyons, deceased.

Dublin, Feb. 15th.

ROME.

(From our own Correspondent.)

OUR Lady of Snow paid a memorable visit to Rome on August 5th, A.D. 352, and the miracle—a snow-heap on the Esquiline, near the market of Livia—caused the reigning Pope Liberius to erect in her honour the Basilica of Santa Maria Maggiore, which, says Freeman, "remains to show what a Christian Church looked like in the days of the first triumph of the faith." Hardly less of a miracle in modern Roman eyes—though certain to have no such august commemoration—has been the two days' snowfall which has just given the Eternal City the aspect of a Swiss town in midwinter and converted the surrounding hills into a bijou Bernese Oberland. Nonagenarian survivals from last century can recall no similar portent in the Urbs Septicollis, while the latest accessions to the English-speaking garrison flock to every elevated point within or without the walls to enjoy a panorama as magnificent as it is unique. "Ave Maria" tolls from a hundred belfries, but groups of spectators yet linger on the Loggia of the Pincio, or the esplanade of San Pietro in Montorio, to revel in the solemn sunset, or to draw from its "mighty missal-page" a lesson or homily not unbefitting the devotional hour.

Another phenomenon much more familiar, though scarcely less picturesque, is apt to follow from heavy snowfall on the Umbro-Sabellian uplands. The Tiber, swollen by the

melted snow, has only to be impeded at its outlet by a steady west wind, and its regurgitant waters flood the city and reduce it for a time to something like Venice. For such an invasion—the only one that King and Consul, Emperor and Pope, have alike failed to repel—experience has provided palliatives, if not remedies; and the pontoon service, patrolling the nocturnal streets with flambeaux, and, in the Jews' quarter, filling with bread the baskets lowered from second and third storeys for the refection of the isolated inmates, will add another to the picturesque situations which somehow never fail the visitor in Rome. Meanwhile, the health of the city is admirable; hardly a case of fever has been known for weeks; and if the magnificent weather, with its skies of azure and its lovely spring sunshine, have tempted enthusiastic archæologists or artists to outstay their strength in damp ruins or gusty basilicas, the result has been oftener seen in catarrhs or mild bronchitic attacks than in any more serious ailment of the respiratory or circulatory systems.

Not Rome, but Florence, has this season been the centre of sanitary interest; and now that the City of Flowers has been able to clear herself of the imputations directed at her by non-professional censors, it is again the turn, not of Rome, but of Umbria and Upper Italy, to attract the attention of the hygienist. A trichina scare has just been averted from Camerino and that populous agricultural neighbourhood by the prompt intervention of the municipality. A man suffering from aggravated trichinosis died in spite of skilled medical treatment, and immediately the Town Council forwarded an arm of the deceased to Professor Perroncito, the distinguished helminthologist of Turin, for examination. The Professor's report declared that microscopic inspection revealed extensive inter-fibrillary trichinosis in the limb; and, acting on this indication, the health officers of Camerino and district microscopically examined the wares of the pork-butchers' shops, and, as a result, redoubled their vigilance at the slaughter-houses for the supply of such meat. It was proved that, in the fatal case just mentioned, the pork consumed had been of foreign importation; and so, in this direction likewise, a strict surveillance is reimposed on all swine-flesh of non-Italian origin.

A yet severer scourge, for the most part confined to Northern Italy, has also been the subject of preventive legislation. The Chamber of Deputies has now before it the Bill of Signors Grimaldi and Magliani (the Ministers of Commerce and Finance) for excluding from the alimentation of the peasant unsound wheat, or rather maize, the nearest equivalent for the Italian "gran turco." Such food, the chief cause of pellagra, will be put out of reach of the poorer population of the agricultural districts by the establishment of "essiccatoi," or desiccating apparatus, by which the maize is presented for food only when by evaporation it has been deprived of all pellagra-causing elements. Where communes are unable to provide such "essiccatoi" for themselves, they are to be aided towards that end by State subsidies, the aggregate of which shall not exceed 50,000 lire (£2000) annually. This seems a small sum for such an object when we consider that the pellagra-stricken communes in Italy amount to 2453, according to the last returns in 1881. But Signors Grimaldi and Magliani set forth in their Bill that in some of these communes desiccation of the maize is effected without special apparatus, and that in others private enterprise or benevolence provides such apparatus gratuitously. There remain of the communes that require State help for the supply of "essiccatoi" not more than the subvention will amply cover, an "essiccatoio" costing on an average some 2000 lire (£80).

Italy, more than any other European country, is lavish of honours to her great physicians and surgeons. Francesco Puccinotti, the classic historian of medicine, the translator of Aretæus, the acutest intellect ever applied in Italy to medical jurisprudence, author of memorable treatises on epidemics peculiar to the nineteenth century, and in all respects exemplary as a citizen, is about to receive in the Santa Croce of Florence (the Walhalla of distinguished Italians) the tribute of a monument in bronze. Urbino, his native town, heads the subscription-list with 1000 lire (£40), and the Universities of Pisa and Macerata, with the Institute of Higher Studies in Florence, are combining to augment it by their own contributions and those of other seats of learning.

An important addition has just been made to sanitary literature by Dr. Giuseppe Pinto. "I Rioni di Roma, considerati dal Lato Igienico" (The Regions of Rome considered in their Hygienic Aspect). Dr. Pinto's work will be found to warrant the high expectations formed from his previous contributions to the same interesting discussion.

Rome, Feb. 12th.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Gough Ashton, M.B., is granted retired pay; Surgeon-Major Sandford Moore, M.B., is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Surgeon P. E. Maitland, to the *Acorn;* Surgeon S. T. O'Grady, to the *Lion;* Surgeon J. J. Walsh, M.B., to the *Vernon*, additional; and Patrick J. Sheridan to be Surgeon and Agent at Kilmore.

YEOMANRY CAVALRY.—Royal East Kent: Honorary Brigade Surgeon Owen William George, M.D. (late 1st Life Guards) to be Surgeon.

ARTILLERY VOLUNTEERS.—2nd Volunteer (Devonshire) Brigade, Western Division, Royal Artillery: Frederick Adams Dayson, M.D., to be Acting Surgeon.

MEDICAL NOTES IN PARLIAMENT.

Army Medical Officers.

IN the House of Commons, on the 15th inst., Sir G. Hunter asked the Secretary for War whether, in the recent Army Warrant, any alteration had been made in the relative rank, position, or titles of medical officers to those heretofore held by them. Mr. E. Stanhope replied that relative rank has been abolished for all departments; but medical officers retain all the privileges heretofore attaching to it, and that in other respects their status is unchanged.

Police and Sanitary Regulations.

On the 16th inst., on the motion of Mr. Stuart-Wortley, it was resolved that the Committee of Selection should appoint a committee, not exceeding nine members, to whom should be referred all private Bills promoted by municipal and other local authorities, by which it was proposed to create powers relating to police and sanitary regulations which deviated from, or were in extension of, or were repugnant to, the general law.

Open Spaces.

Leave was given to Sir J. Lubbock to bring in a Bill for extending certain provisions of the Metropolitan Open Spaces Act, 1881, with amendments, to urban sanitary districts throughout England and Wales. The Bill was read a first time.

Obituary.

PROFESSOR BÉCLARD.

M. JULES BÉCLARD, who died somewhat suddenly last Wednesday, was the son of the celebrated anatomist Pierre Augustin Béclard. He was born in 1818. After passing through his medical curriculum in Paris, he became house-physician to the Asylum of Charenton, where he remained for three years. In 1842 he took the degree of Doctor of Medicine. His first scientific publication was "Les Eléments d'Anatomie Générale," which had been left in manuscript by his father. Pursuing the same line of study, he published in 1864 the results of his researches on the Cartilaginous System. These were followed by memoirs on "Muscular Contraction in its relation to Animal Temperature," "On the Influence of the Temperature upon the Comparative Development of Organic Systems," "On the Functions of the Spleen," "On the Influence of Light," and "On the Development of Animals." Besides these, M. Béclard furnished numerous contributions to the "Dictionnaire Encyclopédique des Sciences Médicales," and at one time was a frequent writer in the *Gazette Hebdomadaire.* But his principal work was his "Traité de Physiologie Humaine," which has reached its seventh edition, having now been for more than thirty years the standard

text-book for French students. At the University, Béclard obtained his first success in the competition for the Assistant Professorship (*Agrégation*) of Anatomy and Physiology, the unsuccessful candidate being the illustrious Claude Bernard. Two years later, in 1846, being at the time only twenty-eight years of age, he competed for the chair of Anatomy unsuccessfully, and in 1852 he again failed to secure the lectureship on Hygiene. The *concours*, or public competition, being afterwards abolished, Béclard was obliged to wait until the death of Longet, whom he succeeded as Professor of Physiology in 1871. Elected to the Academy of Medicine in 1862, he was at once named annual secretary, and the remarkable panegyrics which he pronounced in this capacity designated him in advance for the functions of perpetual secretary, to which post he succeeded on the death of M. Dubois. In 1881 he became Dean of the Faculty of Medicine, after the death of Professor Vulpian, a dignity which he held at the time of his death.

Béclard had studiously abstained from practice, and devoted all his energies to his duties as a professor and to his functions as perpetual secretary of the Academy of Medicine. When he was nominated Dean of the Faculty his talents as an administrator became evident, and upon the expiration of his first term of office its renewal was claimed by the unanimous vote of all the members of the Faculty, both professors and *agrégés*. His extreme affability, his impartiality, and his well-known kindness made him a favourite with all classes, and no Dean was ever more regretted, both by his colleagues in the professoriate and the students placed under their tuition. In fact, it may be said that Béclard had none but friends—a happy fate for a man of perfect integrity, and who never failed to defend what he thought to be the right.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise on the 3rd inst.:—

Chapman, Robert Hugh, M.R.C.S., Halford-road, Richmond.

Passed on the 10th inst.:—

Skelding, Henry, M.R.C.S., M.B., B.C. Camb., Euston-square.
Bartholomew, Alfred Adam, Crowle, Doncaster.

A BALL was held at the Bristol Lunatic Asylum on the 9th inst.

THE annual ball in aid of the funds of the Liverpool Stanley Hospital was held on the 9th inst.

DR. W. SEDGWICK SAUNDERS, medical officer of health and public analyst for the City of London, last week celebrated his silver wedding.

THE annual meeting in connexion with the South Devon and East Cornwall Hospital was held on the 8th inst., Sir Massey Lopes presiding.

THE Right Hon. G. Sclater-Booth, M.P., has accepted the Presidentship of the Congress of the Sanitary Institute of Great Britain, to be held at Bolton in September next.

UNDER the will of the late Mrs. Elizabeth Hughes, the City of Dublin Hospital has received a sum of £997 2*s.* 5*d.* Mr. Alexander Finlay has given £50 to the Belfast Royal Hospital.

The annual Hospital Sunday collections in aid of the medical charities of Manchester and Salford were made on the 14th inst. The Hospital Saturday collection is to be held on the 19th inst.

ARRANGEMENTS have been made for holding this year a Hygienic Exhibition at Warsaw. The exhibition will be divided into five groups, comprising respectively the hygiene of food, of dress, of dwellings, of schools, workshops, and hospitals, and, finally, statistics and meteorology. The opening is fixed for May 15th, the closing for July 1st.

AT the annual general meeting of the governors of and subscribers to the Nottingham Coppice Hospital on the 10th inst., satisfactory medical and financial reports were presented and adopted.

THE annual meeting in connexion with the Essex and Colchester Hospital was held on the 10th inst.

BRADFORD INFIRMARY AND DISPENSARY.—The sixty-second annual meeting of the governors of this institution was held on the 8th inst. The total number of in-patients during the past year was 1511, and of out-patients 5330, as compared with 1385 and 5137 respectively in 1885. The income amounted to £8110, and the expenditure to about £7842.

ROYAL GENERAL DISPENSARY.—The annual meeting of the governors of this institution was held on the 14th inst., when the report showed that during the past year 11,050 cases had come under the notice of the medical officers, 3684 being new cases, and 2178 visits had been made to 546 patients at their own homes. The statement of receipts and expenditure was satisfactory, there being a balance at the bankers of £62.

THE thirty-fourth annual meeting of the Manchester and Salford Sanitary Association was held on the 4th inst.

HOSPITALS ASSOCIATION.—The third general meeting of the members of this Association was held on the 16th inst., when a paper written by Miss Manson, Matron of St. Bartholomew's Hospital, entitled "Is it Desirable for Metropolitan Hospitals to possess Nursing Institutions, and to supply Nurses for Private Cases outside the Hospital Walls?" was read by Dr. Bedford Fenwick.

BROMPTON CANCER HOSPITAL.—The annual meet- of the governors of this charity was held on the 16th inst. From the report of the committee, it appears that during the past year 1028 new patients were received, 652 being in-patients, and 976 out-patients. The total number of visits of new and old out-patients was 6276, against 5360 in 1885.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor Charles Barrett Lockwood, F.R.C.S., will deliver a course of three lectures on "The Development and Transition of the Testicle, Normal and Abnormal," on Wednesday, Friday, and Monday, Feb. 23rd, 25th, and 28th, at 4 P.M. precisely each day. Students desirous of attending these lectures are admitted on the introduction by a Fellow or Member of the College.

THE JUBILEE.—At a meeting at Chipping Norton on the 8th inst., it was decided to erect a cottage hospital to commemorate the Queen's Jubilee. A site of land has been presented and several subscriptions are already promised. A suggestion has been made that the Children's Hospital in Great Ormond-street be completed by means of a subscription raised among the children of England in celebration of the Jubilee.

GUY'S HOSPITAL.—Mr. J. S. Morgan has promised £10,000 in aid of the funds of this hospital, on condition that the amount required to put the institution into a state of thorough efficiency—viz., £100,000—be secured on or before the 1st day of May next. A grand afternoon concert in aid of the Special Fund will be given at Willis's Rooms on the 22nd inst., when Mdlle Antoinette Trebelli, Madame Patey, Mr. Edward Lloyd, Mr. Santley, and other distinguished artists will appear.

THE TRAINED NURSES' ANNUITY FUND.—The Committee of the Trained Nurses' Annuity Fund desire to call the attention of lady superintendents and matrons of hospitals, infirmaries, &c., to the existence of this fund, which was founded in 1874, and has been steadily increasing ever since. At this moment twelve annuities of £15 per annum have been permanently founded, and above £4000 is invested in the hands of trustees, the interest of which pays the annuitants, so that there is no danger of an annuity failing through lack of funds; but the number of applicants is daily increasing. It is calculated that there are now about 10,000 nurses in the United Kingdom. If each would give 1*d.* a month or 1*s.* a year towards the fund, its powers of usefulness would rapidly increase. Lady superintendents and matrons would therefore do well to bring this matter before the nurses on their staff, and to plead on behalf of their sisters whose health has broken down under the fatigue and anxiety of their arduous profession. Communications may be addressed to R. Gofton Salmund, Esq., hon. secretary, 73, Cheapside, London, E.C.; or to Lady Bloomfield, Shrivenham, Berks.

DEATHS FROM CHLOROFORM.—On the 10th inst. an inquest was held at Sheffield on the body of a woman who had died from the effects of chloroform, which had been administered for the performance of an operation. A verdict of death from syncope was returned. On the 14th inst. an inquest was held at the Ipswich and East Suffolk Hospital on the body of a man who had died at that institution while under the influence of chloroform. The jury returned a verdict in accordance with the evidence, and exonerated the medical man from all blame in the matter.

CITY OF LONDON LYING-IN HOSPITAL.—The 136th annual meeting of the governors of this well-known and deserving charity was held on the 9th inst., when the Committee of Management submitted a report stating that the year 1886 had in many respects been a satisfactory one. There had been an increase in the number of both in- and out-patients, an increase which had been accompanied by a reduced mortality. The number of in-patients delivered during the year had been 283; 287 children had been born—viz., 131 boys and 156 girls; 15 children were stillborn; 3 women and 5 children had died. In the out-patient department 1249 women had been delivered, as against 1118 in 1885. The income for the year from all sources, together with the balance left over at the end of 1885, was £3166, while the expenditure amounted to £2925.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BROOK, W. F., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

BROWN, C., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

BULSTRODE, H. T., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

CALVERT, J. T., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

CLARKE, FREDK. H., M.B., C.M.Ed., has been appointed House-Surgeon to the Great Yarmouth Hospital.

DAVIES, E. T., M.D., C.M.Ed., has been reappointed Assistant Surgeon to the Hospital for Women, Shaw-street, Liverpool.

EVANS, C. S., M.B.Cantab., M.R.C.S., L.S.A., has been reappointed Resident House-Physician to St. Thomas's Hospital.

FITZGERALD, G. C., B.A., M.B., B.C.Camb., M.R.C.S., has been appointed Junior Assistant Medical Officer to Cane-hill Asylum, Surrey, vice H. Gardiner Hill, promoted.

HAWKINS, H. P., M.R.C.S., L.S.A., has been appointed Assistant House-Physician to St. Thomas's Hospital.

HINSHELWOOD, JAMES, M.A., M.B., C.M., has been appointed House-Surgeon to the North Riding Infirmary, Middlesbrough-on-Tees, vice Fraser, resigned.

HUTTON, J. S., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed House-Surgeon to St. Thomas's Hospital.

MACKVOY, H. J., L.R.C.P., M.R.C.S., has been appointed Resident Accoucheur to St. Thomas's Hospital.

MONTAGUE, A. J. H., M.B.Dur., L.R.C.P., M.R.C.S., L.S.A., has been reappointed Non-resident House-Physician to St. Thomas's Hospital.

O'BRIEN, P. M., M.R.C.S., has been appointed Resident Medical Officer to the North London Hospital for Consumption, Hampstead.

PESKETT, ALFRED FREEMAN, M.R.C.S., L.S.A., has been appointed Medical Officer of Health for the Leyton Urban District, and Surgeon to the Master Bakers' Almshouses, vice A. Peskett, M.D., deceased.

PHILLIPS, H. HETGATE, M.D., L.R.C.S.I., has been appointed an Honorary Consulting Surgeon to the Reading Dispensary.

SANSOM, H. A., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

SKELDING, H., M.B., B.A.Camb., M.R.C.S., L.S.A., St. Bartholomew's Hospital, has been elected Resident Surgeon to the Bedford General Infirmary, vice Pynsent C. Smith, whose term of office has expired.

SOLLY, E., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

STABB, E. C., L.R.C.P., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

STACY, J. H., L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator to the First District of the Henstead Union, Norfolk, vice T. W. Richardson, M.R.C.S., L.S.A., resigned; also Medical Officer to the Sixth District of the Norwich Union, vice C. W. Doyle, M.B., resigned.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been appointed House-Surgeon to St. Thomas's Hospital.

SYMES, B. WEST, M.D.Edin., M.R.C.S., has been appointed Medical Officer to the Halifax Post Office, vice Solomon Smith, M.R.C.S., &c., resigned.

SYMES, G. DICKINSON, M.R.C.S., late Clinical Resident, Bethlem Royal Hospital, has been appointed Assistant Medical Officer to the Lancashire County Asylum, Rainhill.

TONKING, J. H., L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

WALDO, F. J., M.A., M.D Cantab., M.R.C.S., has been appointed Assistant Physician to the Chelsea Hospital for Women.

WHEATLY, A. W., M.B., S. Sc.C. Dur., M.R.C.S., has been appointed Surgical Registrar and Anæsthetist to the National Orthopædic Hospital.

WHEATON, S. W., L.R.C.P., M.R.C.S., has been reappointed Resident House-Physician to St. Thomas's Hospital.

WILLOUGHBY, EDWARD F., M.B.Lond., M.R.C.S., has been appointed Chief Medical Officer to the Sanitary Assurance Association, vice Stevenson, resigned.

WINFIELD-ROLL, G., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been appointed Second Ophthalmic Clinical Assistant to St. Thomas's Hospital.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY.—Assistant House-Surgeon (qualified or unqualified). Board and washing, but no salary.

ECCLES AND PATRICROFT HOSPITAL, near Manchester.—House-Surgeon. Salary £60 per annum, with board and rooms.

ROYAL PIMLICO DISPENSARY.—Medical Officer.

SALFORD AND PENDLETON ROYAL HOSPITAL.—District Surgeon. Salary £80 per annum, with board and lodging.

Births, Marriages, and Deaths.

BIRTHS.

BUSHE.—On the 10th inst., at Beaufort Lodge, Hounslow, the wife of Surgeon-Major Cecil Bushe, M.B., Medical Staff, of a son.

CHAPMAN.—On the 11th inst., at Denham House, Goldhawk-road, W., the wife of C. W. Chapman, L.R.C.P.Lond., M.R.C.S., of a son.

GAIRDNER.—On the 10th inst., at Gibson-square, N., the wife of John Gairdner, M.R.C.S., L.S.A., of a son.

HENTSCH.—On the 11th inst., at Portland-place, Camberwell, S.E., the wife of John Page Hentsch, M.R.C.S., of a daughter.

OGILVY.—On the 9th inst., at Bournemouth, the wife of Surgeon-General Ogilvy, of a son.

TRIPP.—On the 5th ult., at Herat, Institution-hill, Singapore, the wife of C. Ll. H. Tripp, M.R.C.S., L.R.C.P.Lond., L.S.A., of a daughter.

MARRIAGES.

BERRY—BALDWIN.—On the 8th inst., at St. Saviour's, Paddington, F. C. Berry, M.D., to Charlotte Meers, daughter of the late G. T. Baldwin, Esq., of Fakenham, Norfolk.

BLANCARD—TAYLOR.—On the 9th inst., at St. George's Church, Ramsgate, by the Rev. C. E. Shirley Woolmer, Vicar of Ramsgate, Surgeon J. T. Blancard, Indian Medical Staff, to Edith Emma Mary, younger daughter of Charles Taylor, Esq., late of Ealing College.

BRADBURN—CHILCOT.—On the 14th inst., at Christ Church, Ealing, W., by the Rev. J. S. Hilliard, M.A., James Denham Bradburn, F.R.C.S.Edin., eldest son of James Bradburn, Esq., of Monks' Hall, Eccles, Lancashire, to Emily Victoria, widow of the late Jas. Chilcot, M.R.C.S., of Mere, Wilts.

DYSON—WALL.—On the 10th inst., at Stoke Prior Church, by the Rev. Harcourt Aldham, B.A., Thomas Edward Dyson, M.B., I.M.S., to Annie, eldest daughter of the late Wm. Wall, Esq., of Stoke Prior, Worcestershire.

GOSTLING—PARKINSON.—On the 10th inst., at St. Mark's, West Hackney, by the Rev. J. G. Pilkington, M.A., Vicar, William Ayton Gostling, M.D., of Worthing, Sussex, to Frances Marion, only daughter of Mr. G. H. Parkinson, of the Royal Courts of Justice, London.

HOLT—BUSTEED.—On the 9th inst., at Isleworth, Percy Holt, Army Medical Staff, to Sarah, only daughter of T. M. Busteed, Esq., Barrister-at-Law, Indian Judge, retired.

STEDMAN—BUCKLEY.—On the 10th inst., at St. James's, Norlands, John Buck Stedman, F.R.C.S., to Emma Buckley, widow of the late John Buckley, Esq., of Manchester.

DEATHS.

AMBLER.—On the 6th inst., at Colville-square, Bayswater, Vincent Ambler, M.D.

BRADDON.—On the 5th inst., suddenly, at his residence, Ham House, Upton-on-Severn, Charles Braddon, M.R.C.S., aged 71.

BUTT.—On Dec. 20th, 1886, at Blenheim, New Zealand, the Venerable Archdeacon Henry Francis Butt, M.R.C.S., in the 71st year of his age.

GIBSON.—On the 16th inst., at Kirkland, Campbeltown, Argyllshire, Gregory Gibson, Medical Student, aged 23.

PRENTIS.—On the 14th ult., at Calcutta (on his way to England), Surgeon-Major Chas. Prentis, Bengal Medical Service, M.R.C.S., F.L.S., &c., late of Gorakhpur, in his 52nd year.

RIDER.—On the 10th inst., John Rider, of Wellington, Shropshire, M.R.C.S., L.S.A., aged 64.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, February 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. E. Milner: On the Different Modes of Administering Mercury in Syphilis, and the Indications for their Application.
SOCIETY OF ARTS.—8 P.M. Mr. W. Y. Dent: Building Materials (Cantor Lecture).

Tuesday, February 22.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 1.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Respiration.
SOCIETY OF ARTS.—8 P.M. Mr. J. Starkie Gardner: Wrought Ironwork.
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Prof. Ferrier: The Functional Topography of the Brain.—Mr. H. D. Rolleston: Description of the Cerebral Hemispheres of an Adult Australian Male.—Mr. Sören Hansen: On a Fossil Human Skull from Lagoa Santa, Brazil.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Henry Morris: A case in which the Urinary Bladder was twice Ruptured, the first time by an Injury, the second time—seven years after the first—by the giving way of the Cicatrix.—Mr. W. H. Bennett: A case of Extra-peritoneal Rupture of the Urinary Bladder, the Direct Result of Aspiration above the Pubes, with Remarks on Some Objections to the Use of the Aspirator as a Means of Evacuating the Bladder, and Suggestions for the Treatment of certain cases of Retention of Urine.

Wednesday, February 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.
SOCIETY OF ARTS.—8 P.M. Mr. John W. Urquhart: Recent Advances in Sewing Machinery.
HUNTERIAN SOCIETY.—8 P.M. Dr. Scarth: A Review of Forty Cases of Diphtheria, illustrating its Manner of Spreading, and its Relations to other Fevers, to Diathesis, and to Neurotic and Paralytic Conditions.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Adjourned Discussion on Dr. Fitzgerald's paper on the Use and Abuse of Pessaries. Council at 8 P.M.
NEUROLOGICAL SOCIETY OF LONDON.—8.30 P.M. Exhibition of Clinical Cases.

Thursday, February 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Edmund Gosse: The Critics of the Age of Anne.

Friday, February 25.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
SOCIETY OF ARTS.—8 P.M. Mr. Holt S. Hallett: New Markets and Extension of Railways in India and Burmah.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Annual General Meeting for Election of Officers. President's Address.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hughlings Jackson: A case of Paralysis of Left Leg from Subcortical Disease.—Dr. Carrington: A case of Rheumatic Hyperpyrexia treated by the Cold Bath.—Dr. Hadden: A case of Epilepsy following an Injury to the Leg.—Mr. Bowlby: Cases of Profuse Hæmaturia in connexion with Granular Kidney. Living Specimens: Dr. Arthur Davies: Two cases of Myxœdema (male and female).
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Captain W. de W. Abney: Sunlight Colours.

Saturday, February 26.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. The Right Hon. Lord Rayleigh: Sound.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments)

THE LANCET Office, February 17th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 11	30·38	E.	35	33	...	41	31	...	Overcast
,, 12	30·47	N.E.	36	35	...	45	35	...	Cloudy
,, 13	30·48	N.E.	38	35	...	42	34	...	Cloudy
,, 14	30·25	N.E.	35	34	...	41	33	...	Overcast
,, 15	30·34	E.	39	39	...	41	35	...	Overcast
,, 16	30·46	E.	30	...	...	42	27	...	Foggy
,, 17	30·44	S.W.	25	...	...	...	24	...	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
All communications relating to the editorial business of the journal must be addressed "To the Editors."
Lectures, original articles, and reports should be written on one side only of the paper.
Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
We cannot prescribe or recommend practitioners.
Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*
We cannot undertake to return MSS. not used.

THE EFFECTS OF ALCOHOL.

A. G.—It is not possible to state with arithmetical precision the proportion of diseases due to alcohol. It is certainly very large. Medical opinion on the diseases due to alcohol is to be gathered from various quarters, rather than from any one book. The views of many eminent medical men may be found in the evidence taken on the subject by the Committee of the House of Lords in 1878-9. There is a preponderating amount of medical opinion to the effect that all but a very moderate amount of alcohol to the majority of people is injurious.

WILL *Medicus* (Salford) kindly forward his card, as the one sent has been mislaid.

NIGHTMARE.

To the Editors of THE LANCET.

SIRS,—I should be much obliged to any *confrère* who would kindly advise me what to do for nightmare, greatly affecting sleep and proper rest. I have no sensation of fright, but wake up after distressing dreams, with disturbed heart's action, flushed face, &c. The amount of nightly disturbance varies; but the shortest interval between falling asleep, dreaming a long dream, and waking has been as little as five minutes. No particular symptoms referable to any special organ in fault. Proximate cause probably due to liver disturbance. I am fifty years of age, and have some lung trouble of five or six years' standing, now quite chronic, and limited to slight expectoration and occasional slight hæmoptysis. I am, Sirs, yours faithfully,
February 15th, 1887. M.D.

ONE REASON FOR AN URGENT CALL INTO THE COUNTRY.

A FRENCH practitioner received a call one afternoon, about five o'clock, from one of his country patients, a farmer who had been in town at market all day, who requested him to drive over at once to see a member of his family. The case not appearing to be urgent, the doctor replied he would go in the morning. "Oh, that will not do at all," said the farmer. "I ask you to go now because I want a lift home, and to hire a trap will cost more than your visit."

Dr. Reihlen (Stuttgart).—We cannot exchange.

COLORADO.

To the Editors of THE LANCET.

SIRS,—I would feel thankful if some of your numerous correspondents would give me their experience of the climate of Colorado for consumptives, and also their opinion of its relative advantages as compared with other climates. I am, Sirs, yours truly,
Feb. 14th, 1887. A PHYSICIAN.

HEAT HOLIDAYS.

WE extract the following paragraph from the *New York Medical Record* of Feb. 5th:—"In Switzerland and some parts of Germany the law provides that all schools, public or private, must give the scholars a holiday whenever the temperature reaches a certain height. The regulations in Basle are that when the temperature reaches 77° F. in the shade by 10 A.M. the school must be closed until the late afternoon. These heat holidays are very popular among the scholars."

Dr. Thos. Reid.—The R.C.P. Edin. does not pretend that its licence is a qualification in surgery as well as physic, as the London College has always maintained is the case with its licence, and as the public bodies have recognised. This statement virtually answers all our correspondent's other questions.

M.D.—The statements contained in the extract from the "chatty letter" are so completely at variance with the results of our own inquiries that we cannot undertake to publish it without more precise and detailed information.

WE have received from *Messrs. Ellis and Steele*, hon. secretaries of the Association of Members of the Royal College of Surgeons, a communication for which we regret we are unable to find space this week.

"DROWSINESS ACCOMPANYING DYSPEPSIA."

To the Editors of THE LANCET.

SIRS,—Drowsiness accompanying digestive troubles is very common; but I think your correspondent, "L.R.C.P. Lond., M.R.C.S.," will find it most extreme in cases resembling the following:—The patient is anæmic and irritable, troubled with palpitation, and sensation of fulness after meals caused by flatus. Bowels may be constipated or not. Used to a sedentary life. The principal points, however, to be looked to are the teeth and urine; the former are bad, and the latter scarcely acid, or else alkaline, and often phosphatic. Alkalinity or deficient acidity is probably present in the stomach, and germs from the teeth swallowed in the saliva. In the stomach, as a rule, the trouble commences; hence the distension and, from pneumogastric irritation, the palpitation. Pepsine can only act in an acid medium, and so the food undergoes some abnormal decomposition, with the production of gas, instead of normal digestion. It is not difficult to imagine that the products of such changes, taken up and passing through the liver into the general circulation, would produce toxic symptoms. The brain, already badly nourished and anæmic, cannot work with blood deficient in oxygen-carrying corpuscles and loaded with morbid products as well. It therefore "sleeps," disturbed, however, by fitful dreams as more or less irritating matter is supplied to it.

What should be the treatment of such a condition? Simply supply what is deficient. If there be constipation, a mild aperient—say, ext. cascar. sag., gr. iii., o. m. ante cib. Attend to the teeth. For the alkalinity and palpitation the following:—℞. Acidi hydroch. dil., m. xv.; tr. nucis vom., m. x.; tr. calumbæ, m. xv.; aquam ad ℥i; ter die post cibos, with or without succus taraxaci, ʒi., or vin. pepsin., ʒi., as required. Limit smoking. Stop all tea, coffee, cocoa, and hot fluids. Let the patient drink cold water for breakfast, light ale, claret, or water at dinner—say, at 2.30—and a light supper at 8 P.M., with the same drink, and no fluid between meals. Nearly finish every meal before drinking. Advise friction with a towel over the abdomen, sufficient out-door exercise, and early bed.

I am, Sirs, yours faithfully,
Feb. 14th, 1887. F. T. S.

"PASSING RICH ON £40 A YEAR."

[THE guardians of a Norfolk union advertise for a district medical officer for ten parishes at a stipend of £40 a year, with extras, he to supply all medicines.—*Local paper.*]

The country parson who, in olden days,
Formed the choice subject of a poet's praise
Spent a calm life of usefulness and cheer,
And thought him "passing rich on £40 a year."

Now Poor-law surgeons, rich in physic's lore,
For arduous work in places half a score,
All drugs supply, the sick poor's ills allay,
And £40 a year's the bounteous pay.

The parson lived in frugal days of old;
His wants were few, hence scant was then his gold.
Not so the doctor of the present day:
His wants are many, small howe'er his pay.

Eastern Daily Press.

A QUERY.

To the Editors of THE LANCET.

SIRS,—I have had twenty years of grilling in India, and am now on my way home, with the intention of spending a year or two there. I fear the cold of the home winter unless I can get some sheltered spot by the sea, wherein to pass the cold season under favourable circumstances. I do not care whether the time be passed in England or Ireland, if I can only be sure of a mild and tolerably equable temperature by the sea. I shall feel much obliged if some of your readers will favour me with advice as to the best place to go to which shall fulfil the foregoing conditions and be tolerably cheap.

I am, Sirs, yours faithfully,
February, 1887. J.

A ROMAN SKELETON FOUND AT PLUMSTEAD.

A SHORT time since a most interesting discovery was made by some workmen in a field at Plumstead of a leaden coffin containing a skeleton. Various persons, more or less learned in antiquarian matters, all coincided in placing the date of the leaden coffin about 1400 years ago, and as being probably of Roman workmanship. The owner of the ground promised to give the remains to a medical man for a museum, but was unable to carry out his intention, as the Vicar of Plumstead had the relics buried privately in the parochial churchyard, and now refuses to reveal their present position. This action of the vicar was discussed at first in a tone of banter, and afterwards with more seriousness, at the last meeting of the Society of Antiquaries. The remains had fortunately been sketched by Dr. Caw, assistant medical officer of the Plumstead Infirmary. It is, however, to be feared that unless the vicar should see fit to relent, or the Home Secretary to order exhumation, these interesting relics will be entirely lost to science.

H.—A note on Saccharine appeared in our issue of Dec. 18th last, page 1193; one on Antifebrine in THE LANCET for Sept. 4th, page 462, and another on Oct. 2nd, page 645.

SEA-SICKNESS.

To the Editors of THE LANCET.

SIRS,—Dr. Paget Thurstan, while offering an explanation of the cause of sea-sickness, has certainly hit upon a very old and usual mode of treatment. That it is the abdomen, rather than the brain or spinal cord, which requires treatment I feel convinced. On short voyages the best preliminary is, no doubt, a good meal of cold meat, and then in a couple of hours or so the application of a broad belt of webbing or rubber. It appears to me rather the up-and-down pitching movement of the vessel than the side-to-side rolling action which invokes the sensation. The supine position is a distinct advantage, and serves to keep off the sickness more permanently than anything else. Dr. Gowers says that "sea-sickness is not improbably due to the oscillations of the endolymph in the semicircular canals"; but, surely, this oscillates freely enough in ordinary locomotion. The puzzle is, why do some people always suffer and others never? And who are most exempt, the stout or thin, the tight-laced or the rationally dressed?

I am, Sirs, yours faithfully,
Feb. 12th, 1887. J. RUSSELL HARRIS, M.D.

To the Editors of THE LANCET.

SIRS,—Dr. Paget Thurstan's letter to THE LANCET last week is one of great practical value. I have always thought a great deal might be done in the way of alleviating sea-sickness by mechanical means. It may interest your readers to hear how I prevented myself from being ill last time I crossed from Boulogne to Folkestone. I am a very bad sailor. My method was as follows:—I stood up erect in the cabin, near the door, where I was at the same time protected from the weather and had plenty of fresh air to breathe. I kept tight hold of one of the pillars supporting the deck overhead with one hand, and as the boat heaved upwards and down again as it went over a wave I took a few rapid paces, between a walk and a run, uphill as it were. In this manner I deceived my stomach. That organ imagined the motion was due to my own exertions, which it did not object to submit to, and never found out that at the same time that I walked or ran uphill the boat was playing all sorts of tricks with me. I stood with my face in the direction the boat was going. The passage was an unusually bad one, nearly everyone on board being affected; but I escaped. The method I have endeavoured to describe is rather fatiguing, as it involves standing during the whole passage. It is therefore only suitable for a short sea passage. I have tried other mechanical means to prevent sea-sickness, but have never found one equal to this in efficiency for a short passage.

I am, Sirs, your obedient servant,
Richmond-terrace, S.W., Feb. 15th, 1887. HENRY SUTHERLAND, M.D.

To the Editors of THE LANCET.

SIRS,—At page 350 of your last issue is an interesting note upon the above affliction by Dr. Thurstan, who suggests whether a belt that keeps up pressure on the stomach might not be useful. A reference to Section 862 of the "Medical Digest" will show that this plan has many advocates. One gentleman advises collodion applied to the abdomen. Singing has been affirmed to prevent an attack, evidently acting by fixing the abdominal muscles. Lying on the right side is also stated to be a specific.

I am, Sirs, yours truly,
Boundary-road, N.W., Feb. 14th, 1887. RICHD. NEALE, M.D. Lond.

"FISSURED LIP."

To the Editors of THE LANCET.

SIRS,—If those gentlemen who advocate the heroic treatment of paring the edges and putting in harelip pins for fissure of the lip would try keeping the part moist with vaseline or other greasy application, and forbid all sources of irritation, smoking especially, they would find the fissure rapidly heal.—I am, Sirs, yours truly,

T. GRANT LANGHORNE, M.R.C.S., &c.
St. James's-square, W., Feb. 15th, 1887.

THE JACOB TESTIMONIAL.

THE sum subscribed to this fund now amounts to about £431. We are asked by the honorary treasurer to remind gentlemen of their subscriptions promised, in the hope that they will forward them immediately, so that their names may appear in the address about to be presented.

Mr. E. H. Hackett.—The literature of the subject is scattered about in pamphlets and publications. Our own columns have contained a large amount of information on Pasteur's method.

Mr. G. W. Parker.—1. We think not.—2. Scoresby Jackson's work on Medical Climatology might be consulted.

TREATMENT OF DIPHTHERIA.

To the Editors of THE LANCET.

SIRS,—Having regard to the present prevalence of diphtheria, I hope you will allow me to call the attention of the profession to the very valuable and, I believe, specific effects of sulphite of magnesia upon this disease. I was first indebted to Dr. Lewis of Dalbeattie, N.B., for my introduction to the drug, and have used it during the past eight years with unfailing success. I first drew attention to the remedy in a paper I read some few years ago before the Bradford Medico-Chirurgical Society. I use the sulphite in the proportion of 1 ounce to sixteen ounces of water as a gargle every hour (directing the bottle to be well shaken before use, as the substance is but sparingly soluble), a little to be swallowed after each gargling. In children and bad cases I likewise apply the powder direct to the diseased fauces by immersing a damp throat brush in some of the powder, thus being able to get a considerable portion clinging to the brush, which I then apply direct to the fauces, where I leave as much of the powder as possible. I unhesitatingly state that this drug in my hands has been the means of saving several lives. An arrest of the disease may be looked for within a few hours of its use and the commencing disappearance of the membrane within from twenty-four to forty-eight hours. Without at present entering into the theory of the cure, I should like to state that I am of opinion that the comparatively speaking insolubility of the powder is an important factor in its action, and that the object to be chiefly aimed at in its application is to leave as much of it as possible clinging about the throat.

I remain, Sirs, yours faithfully,

Bradford, Feb. 14th, 1887. W. GILCHRIST BURNIE, M.R.C.S.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Lauder Brunton, London; Dr. F. Warner, London; Prof. Attfield; Dr. John Williams, London; Mr. Erichsen, London; Mr. St. Clair Buxton, London; Dr. Jacob, Leeds; Dr. Saundby, Birmingham; Mr. Lawson Tait, Birmingham; Dr. Hughes-Bennett, London; Dr. J. R. Harris, London; Dr. Quinlan, Dublin; Sir Dyce Duckworth; Mr. Bland Sutton, London; Dr. Forbes Winslow, London; Mr. Roger Williams, London; Dr. Dowding, Bournemouth; Dr. Illingworth, Clayton; Dr. W. B. Fergusson, Newtown; Dr. J. Lucas, Ramsgate; Mr. W. H. Bennett, London; Mr. A. M. Sheild, London; Mr. T. B. O'Connor, London; Dr. J. F. W. Silk, London; Mr. F. C. Turner, London; Mr. Langhorne, London; Dr. J. K. Fowler; Mr. W. Gem, London; Mr. Keetley, London; Dr. Linde; Dr. Davies-Colley, London; Dr. Beverley, Norwich; Mr. Karkeek, Torquay; Mr. T. W. Reid, Canterbury; Mr. B. H. Fenwick, London; Mr. Linnington Ash, Holsworthy; Dr. Railton, Manchester; Dr. Scilla; Mr. John Marshall, Dover; Dr. Neale, Hampstead; Dr. Solomons; Dr. Ward Cousins, Southsea; Mr. W. H. Ellis, Shipley; Messrs. Wright and Co., Bristol; Mr. G. W. Parker, Christchurch; Messrs. Mawson and Swan, Newcastle; Dr. Fraser, Salford; Mrs. De Vere Mathew; Mr. T. Smith, London; Mr. T. F. Raven, Broadstairs; Messrs. Willing and Co., London; Mr. W. R. H. Stewart, London; Lady J. Manners, London; Mr. Easterbrook, London; Dr. Rayner; Messrs. Harris and Son; Mrs. Rees, Pimlico; Mr. Bunting, Notts; Messrs. Kuhner and Co., London; Dr. Wise, Walthamstow; Mr. Casella, London; Mr. J. W. North, York; Dr. Wilks, London; Mr. Poole, Malden; Messrs. Beale and Sons, Brighton; Mr. Burgess, Manchester; Messrs. Boulton and Paul, Norwich; Dr. Tomkins, Leicester; Mr. Somerville, Edinburgh; Mr. Favell, Sheffield; Dr. Mitchell, Manchester; Messrs. Ferris and Co., Bristol; Mr. Jennings, Lambeth; Mr. Archer, Marseilles; Mr. C. Boyce, Maidstone; Mrs. Thompson, Oldham; Messrs. Hopkinson and Co., Nottingham; Mr. Armstrong, Manchester; Messrs. Brown and Co., London; Mr. Evans, Oswestry; Mr. Pitman, Biarritz; Dr. J. P. Glover, Brixton; Mr. Wright, Derby; Mr. T. D. Cook; Dr. Fleming, Glasgow; Mr. Stokes, London; Mr. W. G. Dickinson; Dr. Shirliff, Kingston; Dr. Wheeler, London; Mr. Lister, Burnley; Mr. Gourlay, Glasgow; Dr. A. Blomfield, Exeter; Mr. Elliott, Carlisle; Mr. W. H. Hughes, London; Mr. Denman, Beaconsfield; Mr. Carless, Liverpool; Mr. Hornibrook, London; Dr. Phillips, Egham; Mr. Bilton Pollard, London; Dr. H. H. Ashdown, Edinburgh; Mr. A. Gresswell, Louth; Dr. Nicholas, Wandsworth; Mr. R. Harrison; Dr. Thursfield, Bridgnorth; Dr. G. Stoker, London; Mr. A. W. Burrell, London; A. J. L.; T.; R. L. K.; M.R.C.S., L.S.A.; Vicar, London; Glasgow Apothecaries' Company; A Physician; Assistant, L.K.Q.C.P.; Pro Bono Publico; M.R.C.S.; Z.; H.; M.D.; M. O. F. S. M. Assoc.; M.D. (Hastings).

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Hope, London; Mr. Dennis, Limehouse; Mr. Macpherson; Messrs. Smith and Son, Birmingham; Dr. Seaton, Sunbury; Messrs. Macfarlan and Co., Leeds; Mr. Hendry, Eastbourne; Dr. Beaman; Messrs. Simpson and Co., Leeds; Mr. Collins, Saxmundham; Dr. McNaughton, New Church; Mr. Miller, London; Mr. Petter, Yeovil; Messrs. Wyley and Co., Coventry; Mr. Alderwood, Battersea; Messrs. Oliver and Boyd, Edinburgh; Mr. Johnston, Glasgow; Dr. McLintock, Church Stretton; Dr. Hicks, Hendon; Mr. Lloyd, London; Messrs. Gale and Co., London; Mr. Macpherson, Middlesbrough; Messrs. Davies and Co., Warrington; Mr. Phillips, Kidderminster; Messrs. Woolley and Sons, Manchester; Mr. Crisp, Keynsham; Mrs. Hitch, Hollington; Mr. Tweed, London; Mr. Horton, Exeter; Mr. Birtwhistle, Barton-on-Humber; Dr. Rayner, Ealing; Dr. Eberle, Thirsk; Messrs. Bell and Bradfute, Edinburgh; Mr. Maclaren, Stickney; Mr. Bentley, New Wortley; Dr. Harris, Pembroke; Mr. Aylen, Fareham; Mr. Proctor, Shifnal; Mr. Smith, Evesham; Dr. More, Kettering; Mr. Cherry, Worcester; Mr. Sargeant, London; Mrs. Ernst, London; Mr. Conyers, Leeds; Mr. Mason, London; Mr. Deacon, Leicester; Messrs. Mertens and Co., London; Mr. Gilbert, Hammersmith; Dr. Hilliard, Aylesbury; Mr. Aiken, Aberdeen; Dr. Lindsay, Belfast; Dr. McLennan, Nairn; Mr. Haywood, Manchester; Miss Reall, Matlock; Mr. Rhydal, London; Mrs. Ellis, Grimsby; Mr. Knebone, Bedford; Mr. Fraser, Clitheroe; Mr. Emminson, Haxey; Mrs. Maitland, London; L. O.; Miss B., Birmingham; M. G., Whitechapel; Secretary, Wrexham Infirmary; Epsilon, Newcastle-on-Tyne; Medicus, Newport; Lady Superintendent, London; M. M.; J. H., Reading; Horace; M.D., London; A., Kingsbridge; Medicus, Ponder's-end; Medicus, Birmingham; J. A. W.; O. K., Peterborough; Surgeon, Eastbourne; Lady Superintendent, St. John's Wood; G. N. G., Uxbridge; Alb; Surgeon, Kirton Lindsey; Matron, Eastbourne; Practitioner; Alpha, Reading; M.D., Swanage; E. L., Manningham.

Western Morning News, Southport Visitor, Bath Chronicle, Bristol Mercury, Hampshire Independent, Oldham Daily Standard, Malton Messenger, Dumfries and Galloway Courier, Dumfries and Galloway Standard, Devon Evening Express, Kent and Sussex Post, Ilfracombe Estates Gazette, Bournemouth Visitors' Directory, &c., have been received.

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